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taacattgtt gtgtagataa tcagtgaggg ctttatgaag tttacacctt tgcattatta
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<210> 453
<211> 752
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (752)
<223> n = a,t,c or g
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<400> 453

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tagcatgtct gggtagatga gtagtaaatc cacaagcaga gcagcagcct ctctctctgg
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ggcatttaga atggggnaca aacacnaaaa acacaagggt tttttttta gggggcgcgg
                                                                     660
getttttet ttttaggggg ggaatttte tttggeeeeg geegetttt aaacggggga
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```

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cetegetgtg teacteatgg accetggeta egtgaatgtg cageeccage etcaggagga
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getcaaagag gagcagacag ccatggttee tecagecate cetettegge getgeagata
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ccctggggtc tgtggttgcg gtccagcggg ctcctgttcg ccaccttcct gctgctggcc
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                                                                      420
tgaactcggc tacgtttgcg agaggaagga tttgctggta aatggctgct gtaatgtcaa
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cetcaacegg geageegtgg catteeagaa cetetteatg geagtegaag ateaetttga
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360

420.

480

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gaggtgtgtc cttcacggag ctgccaggct gggagggagc cctgatggcg tggcttgagt

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<211> 1842

<212> DNA

<213> Homo sapiens

<400> 458

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gtcgggaccg acatagtgag acceptegtt ttttttttta aqaqaaaaaq tqccqqqccq
                                                                     720
aaattcactg tccc
                                                                      734
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1020

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1740

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<213> Homo sapiens

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1140

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960

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gctgttactt agacttggcc aggctgagag gcgttcacta catcacttgg cgacggcaga
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ccaactacte tttcgatgta gaagaattta tgtatettgt cettcagget gcaqaccacg
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agataaagca tggagttggc taatggatgc tgaactaaat ctccataccc acttcatccg
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tgtttttggc ttatgtatgg gatgctagaa tggcctatct ccatgtattt tgttgcattt
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ctccattgct tcttgtgttc tggcgggaat cttggtgatt cttttcaagc actacctgag
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360

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atccagcttt ggaggccttt ttggcccagt ttagccaatt ggaagataaa tttccaggcc
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agagtteett eetgtggeag agaggaegga agttteteea gaageaeete aatgetteea
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accecactga gecagecace atcatattta cageageteg ggagggaaga gagaceetga
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agtgcctgag ccaccatgtt gcagatgcct acacctcttc ccagaaagtc tctcccattc
                                                                      420
agattgatgg ggctggaagg acctggcagg acagtgacac ggtcaagctg ttggttgacc
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tggagetgag ctatgggttt gagaatggcc agaaggetge tgtggtacae caettegaat
                                                                      540
cettecetge eggetecact ttgatettet ataagtattg tgateatgag aatgetgeet
                                                                      600
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cttgacactc ccacctcctt caaccacatg ggattcagga caaatttgag tggggctgtg
                                                                      780
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gagccatccc cagggaggac aaggaggaga teeteatget geacaacaag etteggggee
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aggtgcagcc tcaggcctcc aacatggagt acatgacctg ggatgacgaa ctggagaagt
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ggtgtccaga gaggtgctcg gggcctatgt gcacgcacta cacacagata gtttgggcca
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etegtggeee gggeeetgte ageggeatte acetgtgtgg taggageeat eggetgtggg
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aactetgtgg aagtggetag eettgeacat eetetgatea tgttgaette ateagggtge
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gagaagcact tgagcttggc gtcggtgagt tccctaagcc tcttttgcgt gtgttgcagc
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getttacaaa tatttgatgt atggatggac catgacatcc acaatcagct gegtgttetg
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ggcatgtcct caaagaaaga agggactttg caaacgggaa ggggttggga gctctatcct
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cattcattcc cttgcagcct ttgtgatgtt tgattgcaat ttgccacttc tggtgaggcg
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420

ggtacgcaga atacattatc cagcttaaac tcaacaaacc ctgtttcaac aaactgaaga

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agtggcttaa aaagttttca tgaattaaaa gctaattaaa atctataatq aacaatatcc
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     <221> misc_feature
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360

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660

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<213> Homo sapiens

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<400> 572

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<211> 4692

<212> DNA

<213> Homo sapiens

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<sup>&</sup>lt;211> 1024

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

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agtgtacatt taacatttta gttttatcaa aattttttga aattaagaat tagaaccaga
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getectatea gtatatatgt acacaggtgt geatgecagt gttcaaaaca gattgtgtaa
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aagttcaagc ccgttttaga aagccaacat tttatgttat aatatgctgt taatcaggac
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<212> DNA
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<400> 606

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                                                                      120
gggcatatgt gcttaaacag agaaatatgt ctaaaatatt taaattctaa tataaaaaag
                                                                      180
aaagtgactg tattatttag ggctgcattt tagttgtaag aaaaaagtcc aactcaagca
                                                                      240
aaaatggccc acacaatgga acagtcccag gacccaccgg cttcaggggc tqctccagca
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atggcgcccg gactccctct tgctccgcgt gccttcccat gcactgctt cqtqcttcaq
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cggggtctct gctgatggtg ccattgatga ctgacctcca tgagcttgct ttaccccctg
                                                                      420
ccagcttaag aacagtagtg aaagagaaca tgtgtgtcct cccatttcca gtaaaaactt
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caggcaggag cctcactggc tcagcttggt cccgtttcca tctcccatgc catctccggc
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caggtgacag gctaccatgt cactgcctag ggaagtttag gaagagagtg gcaaagtggt
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gcattagaaa gaacatggcc aggtcacccc acctcctqqq cqqcaqqccc aactccacca
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gtggtccact gtgtgacttc cctgctccct ctaagcaagt cactcctctc ctctgggtct
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cacaagtgtg ttccctcata ctagacagtc tctttctaca ggtatctttc ttcagaatga
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accaagtgtt ttaattaatt aaaaaaaaaa acaactcata aatgacttaa gtgaaacact
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gacctctctg atatgaagaa taatgagcct tatgactata agtttgtgaa atggatgact
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aaacataagg taatgtttat tgttctttgc aagattctgt tatattttat aqttaatttt
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tgaaggaaat ctgctggtat gctttgaaat cgatcaaatg taatggtgat atatgatact
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ccacttgcgg cttttaaaag cattttctt tttgaaaatt attgggacta tttaaaagta
                                                                     360
                                                                     363
     <210> 608
     <211> 592
     <212> DNA
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gataaggagg caaaaccttg ggagaaaaga gcttctggac cagggtcttg acctagagga
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aaaagattgg ctggatgtgg gaactcacac ctgttattcc agtactttgg gaggcatatg
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     <213> Homo sapiens
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     <211> 408
     <212> DNA
     <213> Homo sapiens
     <400> 610
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ctagggtttc tgtgcatgga tccaaccatc ccagccttgg gtacagaact gacatcaatc
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                                                                      300
tgggattccg catgcacagg aacaccttct ccctctacac cctcaacctg gccggggccg
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     <212> DNA
     <213> Homo sapiens
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attagtttta ttatttttcc tttggattgt atcatacagt aaaaaacaaa ttaaagacac
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atttgccaaa accaaaaata ctgttgccag aattttactt agcattcctg acttaccaag
                                                                     240
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acctatagtg cttaagtgga tatatttaat tttagaagag gtaatagaaa tactggattt
                                                                     360
ataaactaat ttttaatgaa atgttgagga aatctgcaaa tatacctgtg aaatgtgaag
                                                                     420
gcactaaagg tgcttcactt tattctataa aaacattgca aatgtggctg ggcatggtgg
                                                                     480
ctcatgcttg taatcccagc actttgggag gccgagacaa gtggatatct tgagctcggq
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tegecageat egaaaacaac aaggttatea taaggaetee agngtttttt cetetaceac
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teggacaceg tetecaaace ataaateeca gaetgtaaat aetgttgtge attggeggeg
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atgtgctatt tgcattctac tttacttgtt gaataagaaa actgtgtggc gttgttctag
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aatccatcat aataatactg tggtgttgac acgggaaagc agtccatttc ttacgacttg
                                                                      240
cacactgage agtgtattgc tgacaaaage atageggact gtgtggaage cetgetggge
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tgctatttaa ccagctgtgg ggag
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cctgaaacct tgttgtttgt gtcaacgctg gatggaagtt tgcatgctgt cagcaagagg
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	gtgtgatcac					1140
	tcaactactt					1200
	ctaccaagat					1260
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	ggcccgaggc					1440
	tcctgctgat					1500
	agcageteca					1560
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	acaggccttt					3420
	taggctgaga					3480
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<212> DNA

<213> Homo sapiens

<400> 615

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<212> DNA

<213> Homo sapiens

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838

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aaaaaaaa
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agagetgtaa cacaaacagg geteagacat getetgtate agtecattte atgetggtga
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tototototg caaattgcag ctactcaacc tgqaqactca qctqtctact tttqtqcaqa
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gatccctgaa cagagatgac aagatcatct ttggaaaagg gacacgactt catattctcc
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540

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cacagetaat eggeattate actateteta ettetateat aacaaeggtt acegeegtgt
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                                                                     480
gccacctcat caaggccgag gacgactgag ggcctctggg ccaccctccc ggctggagag
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<213> Homo sapiens

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120

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egatgggtte tgtettttgg catgtgetet tetgeattag tgqtqtttqt etttqqtqcq
                                                                     540
ctcacagaat ggctgcgttt ttacaacaaa tggctgtact gctgcctgtg gattgtgaac
                                                                     600
ggcctgctgc agtccactgg ttggccctgt gtggttgctg ttatgggcaa ctggtttggg
                                                                     660
aaagccggac gaggagttgt ttttggtctc tggagtgcct gtgcttcggt gggcaacatt
                                                                     720
```

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ttgggagcgt gcctagcttc ttctgttctt cagtatggtt atgagtatgc ctttctqqtq
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                                                                      840
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ccattaat
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                                                                      120
tettgegetg tgteeceate tetaateaet tataetteta ttggtacaga caaatettgg
                                                                      180
ggcagaaagt cgagtttctg gtttcctttt ataataatga aatctcagag aagtctgaaa
                                                                      240
tattcgatga tcaattctca gttgaaaggc ctgatggatc aaatttcact ctgaagatcc
                                                                      300
ggtccacaaa gctggaggac tcagccatgt acttctgtgc cagcagtgaa agggggtctg
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                                                                      420
acgtgttccc accc
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     <212> DNA
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                                                                      120
tgtagccaca gctgaggccc tggaccagct ctctccacac cgcatgctcc gagttgggac
                                                                      180
tctaaggagt ctaggaattt tcattcaaac ttggccttac aggtcactca tcagaaaaat
                                                                      240
acttttttca aggtcaacca atagaacata ctttattcaa cagtttgtta gtttgctttt
                                                                      300
taaatattta gccacatggt atgtaggctt ccatgtacac tcttgccctg gcccctgaaa
                                                                      360
cataagcagg gggctcttct gtacatttgc ccagcttccc tgccagcctt taaccccagg
                                                                      420
aacctctcag tctacctcct cttttctgcc tctgaatccc tacctttaaa gtcagaacaq
                                                                      480
gccaggcccg gtggctcacg cctgtaatcc cagcactttg ggaggctgag gtgggtggat
                                                                      540
cacttgacat cagtagttca agaccagcct ggccaacatg gtgaaacccc atccttacta
                                                                      600
aaaatacaaa aattagccag gtgtggtggc gggcacctgt aatcccagct actcagqaqq
                                                                      660
ctgaggcagg agaatcactt gaacccagga ggcagagttt gcagtcagcc aagatcacgc
                                                                      720
cactgtactc cagcctggat gacacagcga gactccgtct caaaataaat acaaaaaaaa
                                                                      780
aaaagg
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     <210> 745
     <211> 379
     <212> DNA
     <213> Homo sapiens
     <400> 745
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ccaccatega etgeaggtee agecagagtg teetetacca egecaacaat aaaaactact
                                                                      180
```

```
taacttggta ccagcagaga ccacgacagt ctcctaaagt gctcattttc tgggcatcta
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cccgggaaac cggtgtgcct gaccgattca ctggcagcgg gtctgggaca gattattcgc
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tcaccataag cagcetgcag gctgaagatg tggccactta ttactgtcaa caatattatg
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atteteegat cacetteeg
                                                                     379
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     <400> 746
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ggagcctaca taaaagagag taaagaggg caaaaaccca gatcagaatg caggcgacgt
                                                                     120
ccaaccttct caacctcctg ctgctgtctt tgtttgccgg attaaatcct tccaagactc
                                                                     180
acattaatcc taaagaaggg tggcaggtgt acagctcagc tcaggatcct gatgggcggg
                                                                     240
gcatttgcac agttgttgct ccagaacaaa acctgtgttc ccgggatgcc aaaagcaggc
                                                                     300
aacttcgcca actactggaa aaggttcaga acatgtccca gtctattgaa gtcttaaact
                                                                     360
tgagaactca gagagatttc caatatgttt taaaaatgga aacccaaatg aaagggctga
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aggcaaaatt tcggcagatt
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     <210> 747
     <211> 942
     <212> DNA
     <213> Homo sapiens
     <400> 747
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                                                                     120
tggaaagaaa aataaccata tatacaaaat catgcataag aaaaaaataa tataaggatg
                                                                     180
tacataccaa atattaataa taatggctat ctctggatag tggaatcaga gggattatgt
                                                                     240
aattttcctg ataaattttc ctgtcctcca aacagcatcc gcttcatact attatttctt
                                                                     300
ggttgtaatt agtttgatat aattetette agaaaggete tgttteacta tatatacete
                                                                     360
aaagcatact tttgatgcag cttctqcaat tcccatctaa aaaqtaqata acacttqctc
                                                                     420
ttatattctg gcatatgaag actatttgta attaacacac tataaaatat gtcaaagcag
                                                                     480
gccaggcatg gtggctcaca cctgtaattc caaaaccttg gcaggaagat cgattgaggc
                                                                     540
caggagetea agaegageet gggeaacata gaaagaeeet atetttacaa aaaaaaettt
                                                                     600
aaaaattagc caggtgtaat agcacatgcc tgtctgtaat cccaqctact tgqcaqqctq
                                                                     660
gaaggtcaag gctgcagtga gccatgatca tgccactgca ctccagccta ggtgacagag
                                                                     720
caagaactca tototaaaaa aaaattttta aataaagcaa aatatgccac agcatagatc
                                                                     780
tgattgtaga aaattattat atggagaact gaaaaatctc ctaatcaaga caaaaatttt
                                                                     840
aaatagagga aaaaaatact atctatcatt agttcaagtt tccattaaga gtagagtqtq
                                                                     900
aagtagetee aagtteagag etggagaatt ttgeatetet ee
                                                                     942
     <210> 748
     <211> 1050
     <212> DNA
     <213> Homo sapiens
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     <221> misc feature
     <222> (1)...(1050)
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 $\langle 223 \rangle$  n = a,t,c or g

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actgggaaga aatacacaag aagtggttgc attagggtga gaaggagtat tcatgttttt
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ctcatccgtc tttttcaaac cttttgtaat gggtggtttt attaatttta taatggaaaa
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tgttaattta aaagcaagtt atttacagtt tagtaagctc atggcaggga aaggctgggc
                                                                     360
totgtttatt gotottactt tttcccaacg cotactccca tgcctqqcaa ttataqaqat
                                                                     420
aataaatgtg ggtgtggaat gagtgcccac tgggaaacct ctcagaggac tttgacccag
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gaacatattt gcacagggtt tccctcagct ggagaaggtt tctctqqqaq aqcaccaqcc
                                                                     540
aggtgtgtgt catgggatat atttacaggg tggtgagctc tcctggtcca acctaaaagg
                                                                     600
teccageaag gtgtagggge cettetggee atttgacate accagggeag ttagtgetga
                                                                     660
tacaaaccac agagaatgaa caaactccaa ctcaaacggg aatggatttt atgtcattct
                                                                     720
gggactttca aacttgataa tagaccaagc atggtggctc acacatgtaa tcctagcact
                                                                     780
ttgggaagcc aaggtgggag gatcgcttgc ggccaggaga ttgagaccag cctgggaaag
                                                                     840
gtagcaagac ccagtctcta caaaaaaatt ttttgttctg ttttgttttt gagacagagt
                                                                     900
ctcaactctg tegtetagge tggagtgeag tggtttgate ttgggtnatt agtttetttt
                                                                     960
tttgtgggtg ttgtgtttaa gtttttgttt tgggttaaat taatctggtc ttgggaatcc
                                                                    1020
ttctttttat cgttggtgga gatttaaccq
                                                                    1050
     <210> 749
     <211> 390
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(390)
     <223> n = a,t,c or g
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cacagaatcc gtggcctcat atgaactgtt tcagccacct tcagtgtccg tgtccccagg
                                                                     120
acagacagcc actttcacct gctctggaga tgacttgggg aacaagtata tttgttggta
                                                                     180
tetgeagaag ceaggeeage ecceegtggt acteatgtat caagataaca agegeecte
                                                                     240
agggatecet gagegattet etggetecaa ttetgggage acagecacee tgaccateag
                                                                     300
egggacecag getaeggatg aggetetata tttetgteag gegtgggaca egaatggage
                                                                     360
tgtgttcgga ggaggcaccc agttgaccgn
                                                                    390
     <210> 750
   <211> 441
     <212> DNA
     <213> Homo sapiens
     <400> 750
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                                                                     120
tcagttgtct catctgtaaa aaggagataa aaattattta cctgcctgaa catgaggtgg
                                                                     180
aggaccatcc tgctacagta ttgctttctc ttgattacat gtttacttac tgctcttgaa
                                                                     240
gctgtgccta ttqacataqa caaqacaaaa qtacaaaata ttcaccctqt qqaaaqtqcq
                                                                     3.00
```

```
aagatagaac caccagatac tggactttat tatgatgaaa tcgttttaga agagcttggt
ggtccatgcc tatatcttga agggaatcca acttagcttt aattaacatt cttaaccttc
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cgcacgcgtg ggtcgacccg g
                                                                      441
     <210> 751
     <211> 449
     <212> DNA
     <213> Homo sapiens
     <400> 751
gtggggaatt ccccagcaat cagactcaac agacggagca actgccatcc gaggctcctg
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aaccagggcc attcaccagg agcatgcggc tecetgatgt ccagetetgg etggtgetge
                                                                      120
tgtgggcact ggtgcgagca caggggacag ggtctgtgtg tccctcctgt gggggctcca
                                                                      180
aactggcacc ccaagcagaa cgagctctgg tgctggagct agccaagcag caaatcctgg
                                                                      240
atgggttgca cctgaccagt cgtcccagaa taactcatcc tccaccccag gcagcgctga
                                                                      300
ccagagccct ccggagacta cagccaggga gtgtggctcc agggaatggg gaggaggtca
                                                                      360
teagetttge tactgteaca gactecactt cageetacag etceetgete actttteace
                                                                     420
tgtccactcc tcggtcccac cacctgtac
                                                                     449
     <210> 752
     <211> 524
     <212> DNA
     <213> Homo sapiens
     <400> 752
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ctaggggttg gcaccggccc cgagaggagg atgcgggtcc ggatagggct gacgctgctg
                                                                     120
ctgtgtgcgg tgctgctgag cttggcctcg gcgtcctcgg atgaagaagg cagccaggat
                                                                     180
gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga ccatactact
                                                                     240
gcaggcagag tagttgctgg tcaaatattt cttgattcag aagaatctga attagaatcc
                                                                     300
tctattcaag aagaggaaga cagcctcaag agccaagagg gggaaagtgt cacagaagat
                                                                     360
atcagctttc tagagtctcc aaatccagaa aacaaggact atgaagagcc aaagaaagta
                                                                     420
cggaaaccag gtagtctgga cattttcctt gctttttgat ttatttaggg gacaactgaa
                                                                     480
aattttaagc taatgaataa agaggctgaa gaagaaaaaa aaaa
                                                                     524
     <210> 753
     <211> 474
    <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc_feature
     <222> (1)...(474)
     <223> n = a,t,c or g
     <400> 753
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ategocoteg geagectegg cotecacace tggcaggece aggetgttee caccatectq
                                                                     120
cccctgggcc tggctccaga cacctttgac gatacctatg tgggttgtgc agaggagatg
                                                                     180
gaggagaagg cagccccct gctaaaggag gaaatggccc accatgccct gctgcgggaa
                                                                     240
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```
tcctgggagg cagcccagga gacctgggag gacaagcgtc gagggcttac cttgcccct
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ggcttcaaag cccagaatgg aataqccatt atqqtctaca ccaactcatc qaacaccttq
                                                                     360
tactgggagt tgaatcangc cqtqcqqacq qqcqqaqqct cccqqqaqct ctacatqaqq
                                                                     420
caetttecct teaaggeest geatttetae etgateeggg ecetgeaget getg
                                                                     474
     <210> 754
     <211> 1222
     <212> DNA
     <213> Homo sapiens
     <400> 754
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gccggtgccc cccatgttgg aacctgagtt ggagattatc tcctaagcag atacctgctt
                                                                     120
ccaaactggg gatgtagggc ttggaaacta aaaaatgcca ggtctgaggg agaggaaaga
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acaagtccag caatacacag agctctgtgt attcagaggg aagttggcag ggttgtgttc
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gggcagagaa actccgagtg gtacaaaggg gacgtgccca gagtggagaa atcatgctaa
                                                                     300
ttgtctgcac tagagctgga gaacgccacc caaaatgaag agagaaaggg gagccctgtc
                                                                     360
cagageetee agggeeetge geettgetee tittgtetae ettettetga tecagacaga
                                                                     420
ccccctggag ggggtgaaca tcaccagccc cgtgcgcctg atccatggca ccgtggggaa
                                                                     480
gteggetetg etttetgtge agtacageag taccageage gacaggeetg tagtgaagtg
                                                                     540
gcagctgaag cgggacaagc cagtgaccgt ggtgcagtcc attggcacag aggtcatcgg
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caccetgegg cetgactate gggacegtat cegactettt gaaaatgget ecetgettet
                                                                     660
cagegacetg cagetggeeg atgagggeac etatgaggte gagateteca teacegacga
                                                                     720
caccttcact ggggagaaga ccatcaacct tactgtagat gtgcccattt cgaggccaca
                                                                     780
ggtgttgggg getteaacea etgtgetgga geteagegag geetteacet tqaaetqete
                                                                     840
acatgagaat qqcaccaaqc ccaqctacac ctqqctqaaq qatqqcaaqc ccctcctcaa
                                                                     900
tgactcgaga atgctcctgt cccccqacca aaaggtgctc accatcaccc qcgtgctcat
                                                                     960
ggaggatgac gacctgtaca gctgcgtggt ggaaaacccc atcaaccaqq qccqqaccct
                                                                    1020
gccttgtaag atcaccgaat acagaaaaag ctccctttca tcaatttggc tccaggaggc
                                                                    1080
attttcctcc ttgggacctt ggtgaagacc tggccaacaa gggaaaaccc cgtctttatt
                                                                    1140
aaaaatacaa aaaatgcccc cgctttgggt gtaagggcct gttttcccgc gcccttcggg
                                                                    1200
aggttttgaa cagtaaatct cc
                                                                    1222
     <210> 755
     <211> 667
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1) ... (667)
     <223> n = a,t,c or g
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aggtggctgg gaagaactet ccaacaataa atacatttga taagaaagat ggctttaaaa
                                                                     180
gtgctactag aacaagagaa aacgtttttc actcttttag tattactagg ctatttgtca
                                                                     240
tgtaaagtga cttgtgaatc aggagactgt agacagcaag aattcaggga tcggtctgga
                                                                     300
aactgtgttc cctgcaacca gtgtgggcca ggcatggagt tgtctaagga atgtggcttc
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ggctatgggg aggatgcaca gtgtgtgacg tgccggctgc acaggttcaa ggaggactgg
                                                                     420
ggcttccaga aatgcaagcc ctgtctggac tgcgcagtgg tgaaccgctt tcagaaggca
                                                                     480
aattgttcag ccaccagtga tgccatctgc ggggactgct tgccaggatt ttataggaag
                                                                     540
```

```
acgaaacttg tcggctttca agacatggag tggtggtngg cccttgttgg gagaaccccc
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ttccttccct ccctttacgg aaacccggca cttggttgcc agccaagggt ccaaaccttc
                                                                     660
ggggaaa
                                                                     667
     <210> 756
     <211> 411
     <212> DNA
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     <220>
     <221> misc_feature
     <222> (1)...(411)
     <223> n = a,t,c or g
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                                                                     120
aaatccctga agaaacttaa atgtcctgct cctgtccgcc ctgcttcttc accctcttcc
                                                                     180
tccactctat ttgccaagac atctcctggt ttcatcccca aactcccacc ttagattctc
                                                                     240
tettaaactg gatagatgat eteatetttt aeggeaetet gtataactte tteecagaag
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agacgcctct gtttaccttc ctactcactc tatatctatc cctcctgctc ctttggctac
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                                                                     411
     <210> 757
     <211> 388
     <212> DNA
     <213> Homo sapiens
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caggaggagg ggaggagaga gtggggctct tctatcggaa cccctcccc atgtggatcc
                                                                     180
gccccaagcg gaggtcgcgg aggaggttat cgaaaatatg cccgccttgc gccccgcttt
                                                                     240
getgtgggeg etgetgagee tatggetgtg etgegegaee eeegegeetg cattgeaatg
                                                                     300
tectgaagge tatgaaccet ecceactaga ecgaaagtge geteectace ecaatgteag
                                                                     360
acgatectge ceatgeceag aaggtttt
                                                                     388
     <210> 758
     <211> 843
     <212> DNA
     <213> Homo sapiens
     <400> 758
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atcagtaaac agcaacacaa caatcaactg ggcctttttg atgaagacaa aaccatagag
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gaaaaccatt agaagaggta ataaaggccc ttcttataca gttaatagag agcctcctgg
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                                                                     300
actaaaacat tatcttcacq qqaattqatt ttacqtcttc caaacacata tqccacctta
                                                                     360
attgtgattt gtgtgatagt tcagctqctg aaaqctttcg tttatctcta cctggttaaa
                                                                     420
```

```
caactttaaa taataacaag tcaatatatc tgtttattga ccagggttct tctcatcccc
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ctcatttttc acattctcaa tggggagata taattgttta aaaaatggaa tgaaqccggg
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tggcatggct tacacttgta attccagcta tttgggaggc taaggcagga ggattgctcg
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aaaactaaca ccccgggttc ctgactactc aaaagggtga ggcagaggat cacttgagcc
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     <210> 759
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catgcccage ggetgccgct gcctgcatct cgtgtgcctg ttgtgcattc tgggggctcc
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cggtcagcct gtccgagccg atgactgcag ctcccactgt gacctggccc acggctgctg
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cagtggctgg gcaggcaagt tctgtgacaa agatgaacat atctgtacca cgcagtcccc
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accaggette catgggegtg actgegageg caaggetgga ceetgtgaac aggeaggete
                                                                     540
cccatgccgc aatggcgggc agtgccagga cgaccagggc tttgctctca acttcacgtg
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2040

2100

2160

2220

2280

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<sup>&</sup>lt;211> 555

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;400> 765

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<212> DNA

## <213> Homo sapiens

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ccaattgaga tcagctcctc tcgtctgacc aagttgaccc gccgaaccac cgacaggaag
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                                                                     780
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gaaggetgte atcaaaatgg tettgeeete eetgtagtgg aagaagggga ggttetetea
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cactetetag aageagagea caggttattg aaagetatgg gttggeagga atateetgaa
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aatgatgaga attgccttcc cctcacagag gatgagctca aagagttcca catgaagaca
                                                                     960
                                                                    1020
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agtagcagtg aaacatcaga tgacgatgcc tggaagtagg catataaatg ctcacagtta
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gctgtggtct agcataaagg cggagcccag aagaaggggc ggggtatggg agaagcctcc
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ccttgtagct gacagaaggt ggccagggag aaggcagcac actgctcgga gaatgaaggc
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cctgcacttc ctgtattcag aactctgtaa aggtgcctcc cactacggcc tgaccaaaga
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taggaagagg cgctcacaag atggctgtcc agacggctgt gcgagcctca cagccacggc
                                                                      420
teceteecca gaggtttetg cagetgeeac cateteetta atgacagaeg ageetggeet
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ctgaagtaga caccaccctg ggtcgtgtgc gaggccggca ggtgggcgtg aagggcacag
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accgccttgt gaatgtcttt ctgggcattc catttgccca gccgccactg ggccctgacc
                                                                      240
ggtteteage eccaeacea geacageest gggagggtgt gegggatges ageactgege
                                                                     300
ccccaatgtg cctacaagac gtggagagca tgaacagcag cagatttgtc ctcaacggaa
                                                                     360
aacagcagat cttctccgtt tcagaggact gcctggtcct caacgtctat agcccagctg
                                                                      420
aggtccccgc agggtccggt aggccg
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     <212> DNA
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tetateacce tggageetge ceageegage gaaggggaca acgteacget ggtegtecat
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gggctttegg gggaactgct cgcctacagc tggtatgcgg ggcccacact cagcgtgtca
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gngcgggagg ctgtgcgccc cgatggcagc ctggacatcc agggcatcct gccccggcac
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tcctgatgga ggagtgcata taattggagg ggaaattggg gaggctttta ttatttttgc
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aacagatgaa gatgcaagac gtgccataag tcgttcagga gggtttatca aggattcatc
                                                                     240
tgtagagctc tttcttagta gcaaggcaga aatgcagaag actatagaaa tgaaaagaac
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tgategtgta ggaagaggge gtecaggate tgggacatea ggggttgaca geetgtetaa
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ttttattgag tctgttaagg aagaagcaag taattctgga tatggctctt caattaatca
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     <210> 781
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     <212> DNA
     <213> Homo sapiens
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ggccagatgg gcagcaccat ggagccccct gggggtgcgt acctgcacct gggcgccgtg
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acateceetg tgggcacage eegegtgetg cagetggeet ttggetgeae tacetteage
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ataattttta tactettetg catttgetaa attteetete attageaggt tatacettta
                                                                                                                             180
tgatcagaaa aaaaattaaa cactgcttct aaaaaatact catctccaqc acttqqaqat
                                                                                                                             240
cacctacctc tacattctac ccaactgage ccaatttagt cttctcaggg ctttgcccaa
                                                                                                                             300
gaacagttca ggaatgcatg cctctgaagg ccttcctgct cttccccttc tggccttggt
                                                                                                                             360
attication cattering controlled to the cancer categories can categories at the cattering can be attended to the categories at the categori
                                                                                                                             420
gttcttcctt gttggtcatc agttaatgaa gtgtattagg tgacctgagt acttgtcagt
                                                                                                                             480
actteccaga ggcaagaaca ttectegeag atcaaggtac etttaagage caagaagete
                                                                                                                             540
agatttggag gcgggagagc tgtactgcat cccctcaaat gttagcagtg ccaagaaatg
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atgggagtet cetettetat tatteacett getecaagga tatettttet tttacgtatg
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ctcatatgca gcagcatatc acatteccta gcccagggag acacatattg gtatcacgat
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tgtaagaccc gaggatcctc cctcagtgat gccgtgcatg tggaattttc acctgactgg
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ctgatcctgc aggetttaca tcctgttttt gaaggagaca atgtcattct gagatgtcag
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aataqttata atttaqaqaa qaatacaqtq qattcaqtct cccqqqataa taqcccatat
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tattgtgctg ggtaaaagag agtttacata cttgqqattg gagaacttta aaacccccaa
```

720

## ttatccaagt ttacgggaag gggcctatac tccggagtac caggggggg 769 <210> 784 <211> 979 <212> DNA <213> Homo sapiens <400> 784 cagaggeteg ggaaggggeg tggateeceg gaggeggtee eegggttgea gtgagggaag 60 120 ccgtggcagt gaccagaagg ggccggaagg gggtggccgc cggccggggcc ccgccctggg 180 gccgcctccc cgcgggttcc gttggctgtg gcggcagctg acgcttgtgg cggcggtggc 240 ttcggggtgg gcgtaagatg gcgacagcag cgcagggacc cctaagcttg ctgtgggct 300 ggctgtggag cgagcgcttc tggctacccg agaacgtgag ctgggctgat ctggaggggc 360 eggeegaegg etaeggttae eeeegeggee ggeacateet.eteggtgtte eegetggegg 420 cgggcatctt cttcgtgagg ctgctcttcg agcgatttat tgccaaaccc tgtgcactcc 480 gtattggcat cgaggacagt ggtccttatc aggcccaacc caatgccatc cttgaaaagg 540 tgttcatatc tattaccaag tatcctgata agaaaaggct ggagggcctg tcaaagcagc 600 tggattggaa tgtccgaaaa atccaatgct ggtttcgcca tcggaggaat caggacaagc 660 ccccaacgct tactaaattc tgtqaaagca tgtaagtacg caaggaggga gggagggaat 720 aaggaagacg gtgggataca actggactga agtttetgtt ttgaacatca cttetgttgt 780 taggacaaca gttaatggat atagagaact aactcagcct attataggta ggaaagaagg 840 gaactggaac actgattccc ttaagtttct tgggcatgtt gccactaagc taggtgtggt 900 totattttgt toccttttcc taaatagatt gggagtaaat cottataact gtacttatgt 960 aagtagatgt actaacaca 979 <210> 785 <211> 550 <212> DNA <213> Homo sapiens <400> 785 ctttcgtgga agaaggaaga agagggtaga ggaggagg gaggaggagg agggaggtgg 60 cggcgccgtg gcggaggagc aggagcagga gggggatgga gaggagaagg ctcctgggtg 120 gcatggcgct cctgctcctc caggcgctgc ccagcccctt gtcagccagg gctgaacccc 180 cgcaggataa ggaagcctgt gtgggtacca acaatcaaag ctacatctgt gacacaggac 240 actgctgtgg acagtctcag tgctgcaact actactatga actctggtgg ttctggctgg 300 tgtggaccat catcatcatc ctgagctgct gctgtgtttg ccaccaccgc cgagccaagc 360 accgccttca ggcccagcag cggcaacatg aaatcaacct gatcgcttac cgagaagccc 420 acaattactc agogetgeca ttttatttca ggtttttgcc aaactattta ctacctcctt 480 atgaggaagt ggtgaaccga cetecaacte etececeaec atacagtgee ttecagetae 540 agcagcaacg 550 <210> 786 <211> 932 <212> DNA <213> Homo sapiens <220> <221> misc\_feature <222> (1) . . . (932)

 $\langle 223 \rangle$  n = a,t,c or g

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<sup>&</sup>lt;211> 378

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

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<211> 910

<212> DNA · <213> Homo sapiens

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<213> Homo sapiens

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ccgan
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agcactcaag tttacaaacc ctcattgggc atgtgggggt tcctgagtcc cctgtgggaa
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cacctcaccg cccgcgaccg aagtgcgcgc gcagccgttg gaagctacga accctgggaa 11760
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<210> 839
<211> 498
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(498)
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<223> n = a,t,c or g

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                                                                   180
accagcacgg gggcgtgata tgcacacagg tccacaagca gactgtggtc cagctcgccc
                                                                   240
tgcgggtggc ggatgaaatg gatgttaaca ttggtcatga ggttggctac gtgatccctt
                                                                   300
tegagaactg etgtaceaac gaaacaatee tgaggttggt ttgtggggtt eagteegete
                                                                   360
cotgotgatg attottggct taggttctac aattotgaag gagcattatt ctggcattct
                                                                   420
acctgttaag catctatgct gtgcagtagc aactggtctc tgtcatcagc cagccagcaa
                                                                   480
cagttgcttt cccacact
                                                                   498
    <210> 840
    <211> 858
    <212> DNA
    <213> Homo sapiens
    <400> 840
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                                                                   120
atgagecage cacettgtgt etteceetee tatgacatag ceetteaget caceetacaa
                                                                   180
ttgccacatg aaaacttctc tcatgaaacc cacagggtgc aagttctctc ctqttgccct
                                                                   240
gagtgcccac tcccaggccc tctgtatgag tgacacttca gtctgccatg gaacctggcc
                                                                   300
ctgctctggc ctggctcctg ctcctgagcc tgctggcgga ttgtctgaaa gctgctcagt
                                                                   360
cccgagactt cacagtgaaa gacattatct acctccatcc ttcaaccaca ccatatcctg
                                                                   420
gtggatttaa atgtttcacc tgtgaaaagg cagcagacaa ttatgagtgc aaccgatggg
                                                                   480
ctccagacat ctactgccct cgagagacca gatactgcta cactcagcac acaatggaag
                                                                   540
tcacaggaaa cagtatctca gtcaccaaac gctgtgtccc actggaagag tgcttatcca
                                                                   600
ctggctgcag agactccgag catgaaggcc acaaggtctg ggcaacagag caagtgacca
                                                                   660
gtactacata gccagctgcc ttctcttcag acatctgcca gtactcatga gcagattctt
                                                                   720
acteccegt gaaggetgte tittgattgt cittatgete tgtgaaaaga egetteetit
                                                                   780
cctgtttact ctaaaagaat acacatttat accagagcat aggacaactg atataaattg
                                                                   840
tgtaaacaca catgaaga
                                                                   858
     <210> 841
     <211> 459
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(459)
     <223> n = a,t,c or g
     <400> 841
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ggaaatgtga cttggaagat caaattgagg aatgcaatac acctttcaag cttgactgta
                                                                   120
actactctag caaacctcat accetttact etgagectaa tatgttttet getgttaate
                                                                   180
tgttetettt gtaaacatet caagaagatg eggetecata gcaaaggate tcaagatece
                                                                   240
agcaccaagg tocatataaa agctttgcaa actgtgacct ccttcctcat gttatttgcc
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atttactttc tgtgtataat cacatcaact tggaatctta ggacacagca gagcaaactt
                                                                   360
gtactcctgc tttgccaaac tgttgcaatc atgtatcctt cattccactc attcatcctg
                                                                   420
attatgggaa gtaggaagct aaaacagacc tttctttca
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<210> 842
    <211> 424
    <212> DNA
    <213> Homo sapiens
    <400> 842
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                                                                     120
acgaataaat ctctgttgaa gagataccat ttgacatttt agagatggct gcatgcaaac
                                                                     180
tettaaaaca tttgaatgga ttttccctct tgttgcccag gctggagtgc aatggtgtga
                                                                     240
teteggttea etgeaacece etgeeteeeg ggtteaageg atteteetge eccageetee
                                                                     300
tgagtagctg ggattagagg catgtgccac catgcccage taattttqtg tttttagtag
                                                                     360
agaeggggtt tttccttgta ggtcaggctg gccctgaact cctgacctca ggtgatccac
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ctgc
                                                                     424
    <210> 843
    <211> 697
    <212> DNA
    <213> Homo sapiens
    <400> 843
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gacttttctc ttctgcatct atatcgattc gctcctctgt actgttccga agaacccage
                                                                     180
acaggeggta cagetgaaca gggaccatac aaaagtgcat tagtaatagg caaatgtttg
                                                                     240
caataatata atagaatggt acctttgttt atcgtctggt gtttttaaaa aatcaaacca
                                                                     300
tacaggagaa tatagatcac aaagaaaagg cctcctacca cactcactca tcaaaacaca
                                                                     360
ctaatcattt taaatttttt tetgttttta attetttetg ggtgetattt agaactteaa
                                                                     420
atgatatact taaaaatacc tacttctgga tttgtaattt cagcaaagtt gaagatttag
                                                                     480
ctaacctaca ctatacccca gcttcactca ttgtccttaa catccaacag ttattagcca
                                                                     540
catcatgatt tccttcagtt tatctaatgg ttgcttttat aactttcaaa ctatcttctt
                                                                     600
aaaatctatt tctggaacca tcacatttgg ctgggatcta agtaccaatg gaattccaat
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tgcaattaag aacccttaac ccacttcctt tttctta
                                                                     697
    <210> 844
    <211> 698
    <212> DNA
    <213> Homo sapiens
     <400> 844
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gtggttaggg tcatggtggt agttaggatc acggctgtac ttagggtcat ggtggtagtt
                                                                     180
aggatcatgg ctgtaattag ggtcatggtg gtagttaggg tcacggctat agttgggqtc
                                                                     240
atggtggtaa ttagggtcac agcgatagtt agcatcatgg tggtagttag ggtcatggtg
                                                                     300
gtagttaggg teatggtggt agetaggee atggtggtag ttagggteat ggetgtagtt
                                                                     360
agagtcatgg cggatagtgc gctcagggct atatgttcgt cgtcgctgaa cgttacgttt
                                                                     420
tegettgaat agteaagece tgeetegtet tttettttt teacteeaca aagaategte
                                                                     480
ettactegaa tgettttte eegtgettaa ggtggeacac catecetgge caacatetet
                                                                     540
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tttggttatg taactettag tegteettge atacacetee eecceegegg ggtgttaeee
cccgagttgc gagagcaatt ctaaactagc cgttttagcg tacccccttc actgaacctg
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ttttcccgac aacctctctt cacggcctgg ggagggcg
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     <210> 845
     <211> 627
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(627)
     \langle 223 \rangle n = a,t,c or g
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gtggtggaga aggcacgcac agccaccatg ctatgtgccg caggcggaaa tccagaccct
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gagatttett ggttcaagga etteetteet gtagaceetg ceaegageaa eggeegeate
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aagcagctgc gttcaggtga gcagagggca ggggtcaaag ggccatgcag acctcagaac
                                                                      300
aagegtettg teagateeca geacageeta etecettggg eetgggeace teeagggetg
                                                                      360
ageggagggt acctggtggg gtgggetggg tettactgca ggtgtgeetg geteagggaa
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gagagetegt ggttggetgt geegttaeet tetteggatt gteagaetee agaetttggg
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ccagttetgc ccctcccagc acatgtgatg tgccagtgtg gtggactett caagggaget
                                                                      540
ctatggatgt taaccetect cettecetgt ancetggeet gagacaggag aatggatgat
                                                                      600
gcctttaatc agagctggtt tgactta
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     <210> 846
     <211> 635
     <212> DNA
     <213> Homo sapiens
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gatgactgtg cccggggtcc ccattgcctt aatggtggtc agtgcatgga taggattgga
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ggctacagtt gtcgctgctt gcctggcttt gctggggagc gttgtgaggg agacatcaac
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gagtgcctct ccaacccctg cagctctgag ggcagcctgg actgtataca gctcaccaat
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gactacctgt gtgtttgccg tagtgccttt actggccggc actgtgaaac cttcgtcgat
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gtgtgtcccc agatgccctg cctgaatgga gggacttgtg ctgtggccag taacatgcct
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gatggtttca tttgccgttg tcccccggga ttttccgggg caaggtgcca gagcagctgt
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ggcagctgcc acceteageg ceagestest tattactest gecagtgtge eccaceatte
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     <210> 847
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     <212> DNA
     <213> Homo sapiens
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ccagagcttg gcgatcccga agcagttggg tctgcggagg gagatgcctt cgggcagccc
                                                                    180
caccacaaac ageteeteeg ggtgcateag aaacttggag tacagcacet tgatgggtte
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cgagatgcca atggccttgg ctgcagagac atggctgctg taagtccagc cggtgccaca
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gggccaggaa tctcaacccc tgtgtcccat gcctgtgtag agggcaaagc tgcctgtcct
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gccagggtag gaggatcatt tgaggtcagg agtttgagac ctggggggcc atcatgggga
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caatactcgc tgttgtatcc
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     <212> DNA
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ggaggcagca cagaaaaagc attctctttg tgaattgctc cgcataccca acatatgtaa
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aagaatetgt tteetgteet ttgtgagatt tgeaagtaee ateeettttt ggggeettae
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ccagatgett ctcatgttcc tactggcaac ctgccttctg gccatcatat ttgtgcctca
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agaaatgcag accetgcgtg tggttttggc aaccetgggt gtgggagetg ettetettgg
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cctaagcata tattctcgac ccctgccctg gatcatctat ggagtctttg ccatcctctc
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     <210> 849
     <211> 413
     <212> DNA
     <213> Homo sapiens
     <400> 849
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                                                                    120
tectetactg gattetegtg aagacettet teagagagat tteggtgteg caccaggage
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gtttccgcaa gtacaaggtg gtgggtctct tcatgaagct gatggcgtcc atcatttcgg
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```
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     <400> 850
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gaggcactcc ggcgggcatg cttgatcaga agaaagggaa gtttgcttgg tttagtcact
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ccacagaaac ccatggtaat gttcccctgt gctctgtgtg tgtaaatgcg tgtgggtgca
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gtgcatatat gtgtatgtat atatgttgtg tgggtgtgtg tgtttgtgaa gggatggcaa
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cctgtccccc tcaaagccac tgccttatca tggct
                                                                      395
     <210> 851
     <211> 904
     <212> DNA
     <213> Homo sapiens
     <400> 851
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tecageatge cettatgece gteattecea agggeteete egtgggtaca ggaaccaact
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caggtaaaca ctatgtatta ggcaattaca gacctctaga gctattggtt ataaaaqaaq
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aagtaatctg gccgggctca gtggctcaca cctctaaacc cagctcttag ggaggccaag
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gtaggtggag gacttgagcc aagaggtcta gtccagcctg ggcaacatgg ggaaaccctg
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tetetacaaa aaatacaaaa attagecagg catagtgtea tgegeetgtg gteecaqeta
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ctctggaggc tgaagcagga aaattgcttg agcttaagaa gcataagttg cagtggggcc
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aagatcaagc ccactggatt tctgccttgg ccaagaaaag aagagggagg agggggaaga
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agggaggagg aaggaaattt aaccagcttt cagctttgaa tgggaatggc ccgagatgaa
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gccc
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     <212> DNA
     <213> Homo sapiens
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cgaaactggt gctcccgacc cctggcaagc ccatcctccc cgtgcagaca ggggagcagg
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ttgctgttgt ttctttaggt attctcatgg gagcagttat aaaaattata gagtttaaaa
                                                                     360
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aactggcgaa ttggaaggaa gaagaaatgt ttcgtccaaa catgtttttc ctcctcctgc
                                                                   420
ttccccctat tatctttgag tctggatatt cattacacaa gggtaacttc tttcaaaata
                                                                   480
ttggttccat caccetgttt getgtttttg gaacggcaat ctccgctttt gtagtaggtg
                                                                   540
gaggaattta ttttctgggt caggctcacg taatctctaa actcaacatg ac
                                                                   592
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     <211> 436
     <212> DNA
     <213> Homo sapiens
     <400> 853
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acactgatgt gtatacagat gctgtttccc tgctgttctc ttctaagtat gaatcccggt
                                                                   120
cccctttgca gacccagtag gtgaatccaa ttacgtagag caggggactg tggagctgtg
                                                                   180
ttgtgagcag cacccaggtg atgccccatg gcagcatgtc ccacattcct tccatcttt
                                                                   240
aaaaaaaatt tttctcggtg gcagtcttgc tctgtcgcct aggctggggt acagtggtgc
                                                                   300
aatctcagct caccgcagcc tcaacctccc gggttcaagc aatcctccca ccttggcctc
                                                                   360
ccaaagccaa agattgcagg tgtgagtcct cggctcggcg gtgggtcgac ccggaattcc
                                                                   420
ggccggacga cgtcgt
                                                                   436
     <210> 854
     <211> 266
     <212> DNA
     <213> Homo sapiens
     <400> 854
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ttggtactga ctgtgccttt catgggatgc ttacttatcc tggtcgatgg cctaaaqccc
                                                                   120
aacegtecag ettatateca gacagggtet caagecacec aggetggagt geagtggcae
                                                                   180
aattatggct cactgtagcc tcaccttcct gggatcaagc aatcttcttt cttcaqcctc
                                                                   240
cagaggaget gggaccacag atcett
                                                                   266
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     <211> 420
     <212> DNA
     <213> Homo sapiens
     <400> 855
agectgeagg eccagetege ecaggeagag eagegggeec agageeteea aggggetgea
                                                                    60
caccaggage teaacaccet caagttecag etgagtgetg aaatcatgga etaccagage
                                                                   120
agacttaaga atgctggtga agagtgcaag agcctcaggg gccagcttga ggagcaaggc
                                                                   180
cggcagctgc aggctgctga ggaagctgtg gagaagctga aggccaccca agcagacatg
                                                                   240
ggagagaagt tgagctgcac tagcaaccat cttgcagagt gccaggcggc catgctgagg
                                                                   300
aaggacaagg agggggctgc cctgcgtgaa gaccaagaaa ggacccagaa ggaactcgaa
                                                                   360
420
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<210> 856

<211> 412

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     <400> 856
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                                                                     120
cgtggggatg agtgacggaa acccagaget cetgteaacc agecagacet acaacggeca
                                                                     180
gagegagaac aacgaagact atgagateee eeegataaca eeteecaace teeeggagee
                                                                     240
atcoctcctg cacctggggg accacgaage cagctaccac tegetgtgcc acggcctcac
                                                                     300
ccccaacggt ctgctccctg cctactccta tcaggccatg gacctcccag ccatcatggt
                                                                     360
gtccaacatg ctagcacagg acagccacct gctgtcgggc cagctgccca cq
                                                                     412
     <210> 857
     <211> 403
     <212> DNA
     <213> Homo sapiens
     <400> 857
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gcccctggct ggtttgggaa ggctgggctc ccaggctggt ggtagtggtg ggggtgattt
                                                                      120
tecteatgaa gececeacte egtecactae tgeetgacae ceaegaageg ageagtttee
                                                                     180
ggagctctcc gatgtagggg cagcaggtgt agagcagctg ctggtccacc acaggcgcat
                                                                     240
tgtccaagcc atgctctggg gctactgtgt ccacctcaaa ggcatatgag ggaccctctt
                                                                     300
ccagaaagaa caagtcctca gggactgtgg gaatctggaa aagccagtcc agggcaqcaa
                                                                     360
gaagcagcag cttgttcagg aaacacatct tcccctcact ctc
                                                                      403
     <210> 858
     <211> 439
     <212> DNA
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    <400> 858
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gctcatcggc atctccattg gcagcctgcg cgggctgggc accaagtgcg ctgtgtccaa
                                                                      120
cgacctcacc gagcaggaga tacggacct ggagcattgt cccaattcct tcttctaatg
                                                                     180
aagaaatacg cttagttgat gatgcgtttg gaaaaatttg tcacatggtc agtgatggct
                                                                     240
cttgggtggt tcgtgttcag gcagcaaaac tgttgggctc tatggaqcaa qtcaqttctc
                                                                     300
atttettgga geagaceett gacaagaage atgteagate tgaggaggaa acgtactgea
                                                                     360
catgagcgtg ccaaggaact ttacagttcg ggggagtttt ccagtggcag aaagtgggga
                                                                     420
gatgatgctc ccaaggaag
                                                                     439
     <210> 859
     <211> 985
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(985)
    \langle 223 \rangle n = a,t,c or g
```

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acctgcacga cgttcatagt tgactccaca gatccgggga gcctggattg tcactggggg
                                                                      120
tetgcacacg ggcateggcc ggcatgttgg tgtggctgta cgggaccatc agatggccag
                                                                      180
cactgggggc accaaggtgg tggccatggg tgtggccccc tggggtgtgg tccggaatag
                                                                      240
agacaccete ateaacceca agggetegtt ceetgegagg taceggtgge geggtgacce
                                                                      300
ggaggacggg gtccagtttc ccctggacta caactactcg gccttcttcc tggtggacga
                                                                      360
eggcacacac ggctgcctgg ggggcgagaa ccgcttccgc ttgcgcctgg agtcctacat
                                                                      420
ctcacagcaa aacacggccg tggcagggac tggaattgac atccctggcc tgctcctcct
                                                                      480
gaaagaatgt gatgagaaga tggtgacgcg aatacacaac gccagccagg ctcagctccc
                                                                      540
atgtcttcct tatgattgcg ttaaggggga gctacggact tgcctagcgg gcaccccttg
                                                                      600
gaataccete ttgcccccgg gaacggtggt tttccagcct acgccccgaa ccccgagaat
                                                                      660
gcatccacgc gcctcgtttt gctgaattga ngatccttgg acgtccttgc atcccacatc
                                                                      720
gtggcgaaat tatttatcta ccccccccg ccggtgggag taattgcata cttccatccc
                                                                      780
tattgcctcg ttttggagga gttggtgact ctcacttcta tcggtaatag gacattaccg
                                                                      840
tatccgacct tatgactcgg ttccccgatc aacaatcgac tagtaccggc cgcggccacc
                                                                      900
tacctcctta taacacttct cttaccggca cctccgtcct tggtagtaaa ctcctggcgc
                                                                      960
tgtatctgtg tgctactgct aggcc
                                                                      985
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     <211> 396
     <212> DNA
     <213> Homo sapiens
     <400> 860
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ctcgaagaga aacatcggga ggcccaagtc tcagcccagc acctagaagt gcacctgaaa
                                                                      120
cagaaagagc agcactatga ggaaaagatt aaagtgttgg acaatcagat aaagaaagac
                                                                      180
ctggctgaca aggagacact ggagaacatg atgcagagac acgaggagga ggcccatgag
                                                                      240
aagggcaaaa ttctcagcga acagaaggcg atgatcaatg ctatggattc caagatcaga
                                                                      300
tccctggaac agaggattgt ggaactgtct gaagccaata aacttgcagc aaatagcagt
                                                                      360
ctttttaccc aaaggaacat gaaggcccaa tgtatt
                                                                      396
     <210> 861
     <211> 686
     <212> DNA
     <213> Homo sapiens
     <400> 861
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                                                                       60
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                                                                      120
ccagcaactt tgaaaacatc ctgacgtggg acagcgggcc agagggcacc ccagacacgg
                                                                      180
tctacagcat cgagtataag acgtacggag agagggactg ggtggcaaag aagggctgtc
                                                                      240
agoggatoac coggaagtoo tgcaacotga oggtggagac gggcaacoto acggagotot
                                                                      300
actatgccag ggtcaccgct gtcagtgcgg gaggccggtc agccaccaag atgactgaca
                                                                      360
ggttcagetc tetgcageac actacectca agecacetga tgtgacetgt atetecaaag
                                                                      420
tgagatcgat tcagatgatt gttcatccta ccccacgcc aatccgtgca ggcgatggcc
                                                                      480
accggctaac cctggaagac atcttccatg acctgttcta ccacttagag ctccaggtca
                                                                      540
                                                                      600
accgcaccta ccaaatggtg agtgtatgtt gcaccctggt ctttctctgc ctaggaagcc
tetteeetee caattagate tgagttgett taagaaaaaa aggggacatg ttatgtaaat
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tagcatttcc cacaacatgt cccttg
                                                                      686
```

```
<210> 862
     <211> 383
     <212> DNA
     <213> Homo sapiens
     <400> 862
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cccctggtgg tggagtgtgg cagctgccct gcctgccctg ctgctgtcta tcctcatctt
                                                                      120
catggaccaa cagatcacag cagtcatcct caaccgcatg gaatacagac tgcagaaggg
                                                                      180
agetggette cacetggace tettetgtgt ggetgtgetg atgetactea cateageget
                                                                      240
tggactgcct tggtatgtct cagccactgt catctccctg gctcacatgg acagtcttcg
                                                                      300
gagagagagc agagcctgtg cccccgggga gcgccccaac ttcctgggta tcagggaaca
                                                                      360
gaggctgaca ggcctggtgg tgt
                                                                      383
     <210> 863
     <211> 673
     <212> DNA
     <213> Homo sapiens
     <400> 863
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                                                                       60
agccaaggat gccgttcagc acttgcacag cacttccgtc atgggcaaca ttatccacgt
                                                                      120
ggagctggac accaaaggtg agcctggcag gggaggagcg tggggagacc tgtcagcccg
                                                                      180
accetttece tecceacet teetgeageg tggggaggae eccecteae tetteettgg
                                                                      240
gatececece cacaacetta tttettagee eceteetgag ggtagagteg egtggageta
                                                                      300
aatgtgttgt ctgttgctag gagacagtct gtaatttacc aaatgtgccg gtccttggcc
                                                                      360
accgcacccc tagggaccac ccggaggctt ccccaccgct gacacccccg cgggccccct
                                                                      420
ctctgagccc tggtggcttg ggtttagaca gtccccagtg ttgcctgtgt taggggagga
                                                                      480
gacagagttt gtttacttgt gggggactga ggaagtgcca ctaggatgcc ttgaaataca
                                                                      540
tcaagagaag gtctgaaaac tgaaaagaga gtcctctaag gatccagggt gtcccccac
                                                                      600
ctccttgctg acccttcccc tctggaagtg gcagccaatc tggggcccag gaatgttgtt
                                                                      660
tcattgataa ggg
                                                                      673
     <210> 864
     <211> 435
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1) ... (435)
     \langle 223 \rangle n = a,t,c or g
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tcatgcgtgc gctgtgtgtt gtgtgtgtat atctgcggag acgcataaag tatgagcgct
                                                                      120
ttttaggatg ggaattgaga tgtaagattt gggggtgagg gccnccctga cccataggcc
                                                                      180
tgacatcete atectatgga ecetagagte tggecaetee aggaacetga eetgetetgt
                                                                      240
geoegecee tgtaageata gaacaccee catgatetee tggagtgggg ceteegagae
                                                                      300
```

```
ctccccgggc cccactactg cccgttcctc agtgctcacc cttaccccaa agccccagga
                                                                     360
nnaccggncc ageceteace tginaggttg accttgcetg gggacagggt gtgaccacq
                                                                     420
accnatacct ntncg
                                                                     435
     <210> 865
     <211> 2161
     <212> DNA
     <213> Homo sapiens
     <400> 865
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agagccgacc gttcaatgtg gctctgaaac tgggccatct ccagagtgga tgctacaaca
                                                                     120
tgatctaatc ccgggagact tgagggacct ccgagtagaa cctgttacaa ctagtgttgc
                                                                     180
aacaggggac tattcaattt tgatgaatgt aagctgggta ctccgggcag atgccagcat
                                                                     240
ccgcttgttg aaggccacca agatttgtgt gacgggcaaa agcaacttcc agtcctacaq
                                                                     300
ctgtgtgagg tgcaattaca cagaggcctt ccagactcag accagaccct ctggtggtaa
                                                                     360
atggacattt tectacateg getteeetgt agagetgaac acagtetatt teattgggge
                                                                     420
ccataatatt cctaatgcaa atatgaatga agatggccct tccatqtctq tqaatttcac
                                                                     480
ctcaccaggc tgcctagacc acataatgaa atataaaaaa aagtgtgtca aggccggaag
                                                                     540
cctgtgggat ccgaacatca ctgcttgtaa gaagaatgag gagacagtag aagtgaactt
                                                                     600
cacaaccact cccctgggaa acagatacat ggctcttatc caacacagca ctatcatcgg
                                                                     660
gttttctcag gtgtttgagc cacaccagaa gaaacaaacg cgagcttcag tggtgattcc
                                                                     720
agtgactggg gatagtgaag gtgctacggt gcagctgact ccatattttc ctacttqtqq
                                                                     780
cagcgactgc atccgacata aaggaacagt tgtgctctgc ccacaaacag gcgtcccttt
                                                                     840
ccctctggat aacaacaaaa gcaagccggg aggctggctg cctctcctcc tgctgtctct
                                                                     900
gctggtggcc acatgggtgc tggtggcagg gatctatcta atgtggaggc acgaaaggat
                                                                     960
caagaagact tccttttcta ccaccacact actgcccccc attaaggttc ttgtggttta
                                                                    1020
cccatctgaa atatgtttcc atcacacaat ttgttacttc actgaatttc ttcaaaacca
                                                                    1080
ttgcagaagt gaggtcatcc ttgaaaagtg gcagaaaaag aaaatagcag agatgggtcc
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agtgcagtgg cttgccactc aaaagaaggc agcagacaaa gtcgtcttcc ttctttccaa
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tgacgtcaac agtgtgtgcg atggtacctg tggcaagagc gagggcagtc ccagtgagaa
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ctctcaagac ctcttcccc ttgcctttaa ccttttctgc agtgatctaa gaagccagat
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tcatctgcac aaatacgtgg tggtctactt tagagagatt gatacaaaag acgattacaa
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tgctctcagt gtctgcccca agtaccacct catgaaggat gccactgctt tctgtgcaga
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acttetecat gteaageage aggtgteage aggaaaaaga teacaageet geeacgatgg
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ctgctgctcc ttgtagccca cccatgagaa gcaagagacc ttaaaggctt cctatcccac
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caattacagg gaaaaaacgt gtgatgatcc tgaagcttac tatgcagcct acaaacagcc
                                                                    1620
ttagtaatta aaacatttta taccaataaa attttcaaat attgctaact aatgtagcat
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taactaacga ttggaaacta catttacaac ttcaaagctg ttttatacat agaaatcaat
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tacagtttta attgaaaact ataaccattt tgataatgca acaataaagc atcttcagcc
                                                                    1800
aaacatctag tcttccatag accatgcatt gcagtgtacc cagaactgtt tagctaatat
                                                                    1860
tctatgttta attaatgaat actaactcta agaacccctc actgattcac tcaatagcat
                                                                    1920
cttaagtgaa aaaccttcta ttacatgcaa aaaatcattg tttttaagat aacaaaagta
                                                                    1980
gggaataaac aagctgaacc cacttttact ggaccaaatg atctattata tgtgtaacca
                                                                    2040
cttgtatgat ttggtatttg cataaqacct tccctctaca aactaqattc atatcttqat
                                                                    2100
tettgtacag gtgeetttta acatgaacaa caaaatacce acaaacttgt etaettttge
                                                                    2160
                                                                    2161
     <210> 866
     <211> 505
     <212> DNA
     <213> Homo sapiens
     <220>
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<221> misc feature
     <222> (1)...(505)
     <223> n = a,t,c or g
     <400> 866
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tggggttgga atattetact ttgttattta tateateata teetteetgg ttgtggtgaa
                                                                     120
catgtacatt qcaqtcatac tgqagaattt tagtgttqcc actqaaqaaa qtactqaacc
                                                                     180
totgagtgag gatgactttg agatgttcta tgaggtttgg gagaagtttg atcccqatgc
                                                                     240
gacccagttt atagagttct ctaaactctc tgattttgca gctgccctgg atcctcctct
                                                                     300
tctcatagca aaacccaaca aagtccagct cattgccatg gatctgccca tggttagtgg
                                                                     360
tgaccggatc cattgtcttg acatcttatt tgcttttaca aagcgtgttt tgggtgagag
                                                                     420
tggggagatg gattctcttc gttcacagat ggaagaaagg ttcatgtctg caaatccttc
                                                                     480
caaagtgtcc tatgaaccca tcaca
                                                                     505
     <210> 867
     <211> 608
     <212> DNA
     <213> Homo sapiens
    <400> 867
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                                                                      60
gcagctctga accccaaagc ggctcctctg aattcccagt ttcaagttcc actctgtccc
                                                                     120
tgctgggcat ctcgagatat gggaaacagg gctgttataa ttgccagaca gctgagttct
                                                                     180
gtacatacct tgatttgcaa ttttttttgg ctgcttctca ggacaactgg gggagattta
                                                                     240
gatteettaa aatgeagtta tgaatetatt ggeeteaact etatttetae eeatgaatte
                                                                     300
atttgtactt ggcaaagacg acttaatttc tcatttgtta tgtcatttaa acctctcttt
                                                                     360
agageetete eteaetetta eetgttaata ateggaagte agetacatga aaegtteaat
                                                                     420
ttgggttcca tctcctctga agaaaaatgc agttaaaaaa aaaataagag gtttggccag
                                                                     480
ccgcagtggc tcacacctgt aatcccagca ttttgggagg ccgaggcagt cagatcacct
                                                                     540
gggggcggga gttcgggaac cggcctggcc caacacagga gaaaccccgt cttatactaa
                                                                     600
acaatata
                                                                     608
     <210> 868
     <211> 772
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1) ... (772)
     <223> n = a,t,c or g
     <400> 868 ·
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ctctggccaa ggtggctggc agacaagatg ctgccctcc tgggggcagt gctgcttcag
                                                                     120
aagagagaga agaggggccc tctgtggagg cactggcggc gggaaaccta cccatactat
                                                                     180
gacctccagg tgaaggtgct gagggccaca aacatccggg gcacagacct gctgtccaaa
                                                                     240
geogactget atgtgcaact gtggctgccc acggcgtccc caagccctgc ccagactagg
                                                                     300
atagtggcca actgcagtga ccccgagtgg aatgagacct tccactacca gatccatggt
                                                                     360
gctgtgaaga acgtcctgga gctcaccctc tatgacaagg acatcctggg cagcgaccag
                                                                     420
ctctctctgc tcctgtttga cctgagaagc ctcaagtgtg gccaacctca caaacacac
                                                                     480
```

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ttcccactca accaccagga ttcacaagag ctgcaggtgg aatttgttct ggagaagagc
                                                                     540
caggagcctg catctgaagt catcaccaac ggggttctgg gggctcaccc ctggctgaga
                                                                     600
atgaagggta tgattttggg agaggggaga gccccacggc aacagcacgg ccaatcttgg
                                                                     660
gaggggggg tgggacctc cccctctcc ccnngnanaa acaccggagg gaagatagtt
                                                                     720
gggttttggg aagaaatggc gaatgggacc ggcgccccac cccgccccc ct
                                                                     772
    <210> 869
    <211> 704
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(704)
    <223> n = a,t,c or g
    <400> 869
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                                                                      60
tgagccatgg tgtcttctgc cgtcaaaggg cgaccctaac tgcatcctgc tggagtcgag
                                                                     120
aaaaccaggt agactggaaa ggatgtgtct acagtaactg aaacacatca ctgcgttttg
                                                                     180
ttacagtcaa tgatagggca gatetgagtt ccagagcacg getcacagac ettteettge
                                                                     240
atcagtctgt gccgaagtcn nnnnnnnnc ttttttcttt ttttgcccac attacatcac
                                                                     300
ttcataattt accacctacg tagcatgact gtatatttgg aatcatttct tcacaagttt
                                                                     360
tagaccatat taaaggaaca ctggcagaac cctgtttgat ttccctttcg tctgttcccc
                                                                     420
tacattgccc tcctggcccc cttgaggaac tagatgagcg attagaactg gccagaggtc
                                                                     480
cttggaggaa caacagcgaa acagaagcat tagtagcatt gtcctcccca gtctaacact
                                                                     540
tgtcggaccc ctgatgagca gacttccctg tggggtgttc atatccccat gccccgctca
                                                                     600
gtgggcttca tgtctgagtc atatttgcct gctttccttt gaggtggtgg gcgccaaggt
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tgtgacaaat gcccggagtc ctggagctcg ctgttacggt tttg
                                                                     704
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    <211> 389
    <212> DNA
    <213> Homo sapiens
     <400> 870
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                                                                      60
gtetgtactg egtttatgag etgtgacaet egeegtgaag gtetgeaget teacteetga
                                                                     120
accagcgaga ggaggaaccc accagaagga ggaaaacgcg gaacacatct gaatatcaga
                                                                     180
aggaacaaac tecagacaeg cegeetttaa gaactgtaac agteacegeg agggteegtg
                                                                     240
gtttcattct tgaagtaagt gagaccaaga acctgccaat ttcagacaca atggagagcg
                                                                     300
ccagtcctgc tgcggggcca tacatctatt taatttcctc tcatcttccc cccggttccg
                                                                     360
agaggaaggt gctttcacct gcactgttc
                                                                     389
     <210> 871
     <211> 643
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
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<222> (1) . . . (643)
     <223> n = a,t,c or g
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                                                                    60
aaggagtacg gacgggagtc agaggcagag cgagggtgtg tggagggccg gcggggaccg
                                                                   120
ccgggagcgc gcggatgtcg gtgttcctgg ggccagggat gccctctgca tctttattag
                                                                   180
taaatettet tteagettta eteateetat ttgtgtttgg agaaacagaa ataagattta
                                                                   240
ctggacaaac tgaatttgtt gttaatgaaa caagtacaac agttattcgt cttatcattq
                                                                   300
aaaggatagg agagccagca aatgttactg caattgtatc gctgtatgga gaggacgctg
                                                                   360
420
tgtacatage agtatgtgat gatgacttac cagacctga egaaactttt atttttcact
                                                                   480
taacattaca gaaaccttca gcaaatgtga agcttggatg gccaaggact gttactgtga
                                                                   540
caatattatc aaatggacaa atggcatttt gggaatttat tttcatttta aatattqqcc
                                                                   600
ttcccctcc aattccgcca agtggaagnt tgaaagcccc cct
                                                                   643
     <210> 872
     <211> 498
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(498)
     <223> n = a,t,c or g
     <400> 872
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                                                                   . 60
cgcggcccgc catggatgtg gaggaggcgt tccaggcggt gggggagatg ggcatctacc
                                                                   120
agatgtactt gtgcttcctg ctggccgtgc tgctgcagct ctacgtggcc acggaggcca
                                                                   180
tecteattge actggttggg gecaegeeat cetaecactg ggaeetggea gageteetge
                                                                   240
caaatcagag ccacggtaac cagtcagctg gtgaagacca ggcctttggg gactggctcc
                                                                   300
tgacagccaa cggcagtgag atccataagc acgtgcattt cagcagcagc ttcacctcta
                                                                   360
tegectegga gtggttttta attgccaaca gatectacaa agteagtgca geaagetett
                                                                   420
ttttcttcag tggtgtattt gttggagtta tctcttttgg tcagctttca gatcgcttcg
                                                                   480
gaaggaaaaa agtctatc
                                                                   498
     <210> 873
     <211> 404
     <212> DNA
     <213> Homo sapiens
     <400> 873
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ggattccctc caggtgacga tgctctggtt ctccggcgtc ggggctctgg ctgagcgtta
                                                                   120
ctgccgccgc tcgcctggga ttacgtgctg cgtcttgctg ctactcaatt gctcgggggt
                                                                   180
ccccatgtct ctggcttcct ccttcttgac aggttctgtt gcaaaatgtg aaaatgaagg
                                                                   240
tgaagtcctc cagattccat ttatcacaga caacccttgc ataatgtgtg tctgcttqaa
                                                                   300
caaggaagtg acatgtaaga gagagaagtg ccccgtgctg tcccgagact gtgccctggc
                                                                   360
catcaagcag aggggagcct gttgtgaaca gtgcaaaggt tgca
                                                                   404
```

```
<210> 874
     <211> 435
     <212> DNA
     <213> Homo sapiens
     <400> 874
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gcatccatcg gcagctctgt ggtgagggac agggtgattg gagccaaaag gttgcagcac
                                                                     120
ataagtggcc ttggctacag gatgtactgg ttcacaaact tcctatatga catgctcttt
                                                                     180
tacttggttt cogtctgcct gtgtgttgcc gttattgtcg ccttccagtt aacagctttt
                                                                     240
actttccgca agaacttggc agccacggcc ctcctgctgt cacttttcgg atatgcaact
                                                                     300
cttccatgga tgtacctgat gtccagaatc ttttccagtt cggacgtggc tttcatttcc
                                                                     360
tatgtctcac taaacttcat ctttggcctt tgtaccatgc tcataaccat tatgccccqq
                                                                     420
ttgctagcca tcatc
                                                                     435
     <210> 875
     <211> 703
     <212> DNA
     <213> Homo sapiens
     <400> 875
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                                                                      60
cctgcaccat ttggacatca tccacagacc cctttcgtaa gtgctggatg gcccctqaaq
                                                                     120
coctcaactt ctccttcagc cataaatcag acatctqqtc cctqqqctqc atcattctqq
                                                                     180
acatgaccag ctgctccttc atggatggca cagaagccat gcatctgcgg aagtccctcc
                                                                     240
gccagagccc aggcagcctg aaggccgtcc tgaagacaat ggaggagaag cagatcccgg
                                                                     300
atgtggaaac cttcaggaat cttctgccct tgatgctcca gatcgacccc tcggatcgaa
                                                                     360
taacgataaa gtgagctcag ggtcggggtt tattttaacc tgtggattta tctttcaaca
                                                                     420
tetetecace ctaatacaag cacagetagt tggetttgta acgeeteaaa gaactecate
                                                                     480
acagatgeec tgattatece tgeacagetg ggetttgeec agttetgget eteccaaace
                                                                     540
gtgctgcggc gagtaatccc gaatgtacgg tggagtgagc agactgaccc ccaqqaqqca
                                                                     600
caggaggcgt agccccagg acccacgaca cttttaqqqt tccaqaaaaa aqttttcatt
                                                                     660
caacataaaa aaaaaaaaat tootaaagac aaaaaaaaaa aaa
                                                                     703
    <210> 876
    <211> 429
    <212> DNA
     <213> Homo sapiens
     <400> 876
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aaactgaaag atcccctaat ttgatgagtg agagggtcga gcggaactgg agcacgggcg
                                                                     120
getggetget ggeactgtge etggeetgge tgtggaecea eetgaeettg getgeeetge
                                                                     180
agecteceae tgecaeagtg ettgtgeage agggeaeetg egaggtgatt geggeteaee
                                                                     240
gctgctgcaa ccggaaccgc atcgaggagc gctcccagac ggtgaaatgc tcctgttttt
                                                                     300
ctggccaggt ggccggcacc acgcgggcaa agccctcctg cgtggacgac ctgctcttgg
                                                                     360
ctgcccactg tgctcgtaga gaccctagag ctgcactccg cctcctgctt ccacagcctc
                                                                     420
catcgtcct
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```

<210> 877 <211> 1140 <212> DNA <213> Homo sapiens

<400> 877

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<210> 878 <211> 1139 <212> DNA

<213> Homo sapiens

<400> 878

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<210> 879

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<211> 478
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     <213> Homo sapiens
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     <221> misc feature
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     <223> n = a,t,c or g
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                                                                      120
aatatttgcc cacggcctcc caggcccagg cccatgccac ctgggccccg gcatctgttt
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gaggatetge caatgtgete ttaactgagg acgaaggaag aacacettte tatgagtett
                                                                      240
gcaaagatta cctccttcag gccacaaata tttgagtgca cactacgtgc caggcactgt
                                                                      300
gcagggctgc aggcatagag acagaatgta atctatctgg gccttggacc ccatagggag
                                                                     360
aggggaccac teaggteeat aetteetttg gaettgggge tttggeettg ggaggggegg
                                                                      420
aggtggcgtg gcaagatgaa aaagacatcc tgcccccatc cacttgggca gagcttct
                                                                      478
     <210> 880
     <211> 546
     <212> DNA
     <213> Homo sapiens
     <400> 880
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gageteaggt getgeggtee teeettetge etgaaggagg catatqqeea qqqqeteeqe
                                                                     120
ctgacactca cgaggcagta tatgcggatg atgggagtgc atccagtgat ccatttcctg
                                                                     180
gcctggttcc tggagaacat ggctgtgttg accataagca gtgctactct ggccatcgtt
                                                                     240
ctgaaaacaa gtggcatctt tgcacacagc aataccttta ttgttttcct ctttctcttg
                                                                     300
gattttggga tgtcagtcgt catgctgagc tacctcttga gtgcattttt cagccaagct
                                                                     360
aatacagegg ccetttgtac cageetggtg tacatgatca getttetgee ctacatagtt
                                                                     420
ctattggttc tacataacca attaagtttt gttaatcaga catttctgtg ccttctttcg
                                                                     480
acaaccgcct ttggacaagg ggtatttttt attacattcc tggaaggaca agagacaggg
                                                                     540
attcac
                                                                      546
     <210> 881
     <211> 918
     <212> DNA
     <213> Homo sapiens
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tttgctctga ttgaacggaa tgttccaccq tgtttcatct ttattcatta tcctttgttc
                                                                     120
tttaaaatct gatatattgg cataaaagta attgtacata tatatatgaa tgtgatttat
                                                                     180
tttcctttac atcttttgt tgtgtacagc agggcatata cttctcttgt cttggttgga
                                                                     240
tgcacaaatc tgtgtgcagt gctttttgcc cgttgcctag acgatcactt ggtttctctg
                                                                     300
aggatgtctg gttctcgtaa agagtttgat gtgaaacaga ttttgaaaat cagatggagg
                                                                     360
tggtttggtc atcaagcatc atctcctaat tctacagttg acagccagca gggagaattt
                                                                     420
tggaaccgag gacagactgg agcaaacggt gggagaaagt ttttagatcc atgtagccta
                                                                     480
caattgcctt tggcttcaat tggttaccga aggtccagcc aactggattt tcagaattca
                                                                     540
ccttcttggc caatggcatc cacctctgaa gtccctgcat ttgagtttac agcagaagat
                                                                     600
```

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tgtggcggtg cacattggct ggatagacca gaagtggatg atggcactag tgaaqaaqaa
                                                                      660
aatgaatctg attccagttc atgcaggact tccaatagta gtcagacatt atcatcctgt
                                                                     720
catactatgg agccatgtac atcagatgaa tttttccaag cccttaatca tgccgagcaa
                                                                     780
acatttaaaa aaatggaaaa ctatttgaga cataaacagt tgtgtgatgt aattttagtc
                                                                      840
getggtgate geagaattee ageteacaga ttggtgetet eetetgtete agaetattt
                                                                      900
gctggcatgt ttactaat
                                                                      918
     <210> 882
     <211> 604
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1) ... (604)
     <223> n = a,t,c or g
     <400> 882 .
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                                                                      60
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                                                                     120
cttctaataa aagctctttg tattctggac gagtcatttt ctgtctggac tacattattt
                                                                     180
tcactctaag attgatccac atttttactg taagcagaaa cttaggaccc aagattataa
                                                                     240
tgctgcagag gatgctgatc gatgtgttct tcttcctgtt cctctttgcg gngtggatqq
                                                                     300
tggcctttgg cgtggccagg caagggatcc ttaggcagaa tgagcagcgc tggaggtgga
                                                                     360
tattccgttc ggtcatctac gagccctacc tggccatgtt cggccaggtg cccaqtqacq
                                                                     420
tggatggtac cacgtatgac tttgcccact gcaccttcac tgggaatgag tccaagccac
                                                                     480
tgtgtgtgga gctggatgag cacaacctgc cccggttccc cgagtggatc accatcccc
                                                                     540
tggtgtgcat ctacatgtta tccaccaaca tcctgctggt caacctgctg gtcgccatgt
                                                                     600
ttgg
                                                                     604
     <210> 883
     <211> 1206
     <212> DNA
     <213> Homo sapiens
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cctacagggc ctgctggaga agaccaatgg gtgcatggga tgaccqqcaq cttccctcaa
                                                                     120
gtggcttccc agagactact aggagaactt ggtcctatcg ctgccccac ctggaagctg
                                                                     180
gacttaagga tcccccaaag aacggggcaa ttagaaacct cccacccagc gaagggataa
                                                                     240
getteteaac teagteecac caetetteat egeaaceete tgagtetgea geagaaacaa
                                                                     300
acatetecaa gttacagagg aggggatgga atccccaagg ggccgagcgg tagccetttt
                                                                     360
aacttataag cctgttgatt agcctatacg agttatttgc acgtcaagaa aggaagtagc
                                                                     420
etgeteette etgeagegte etgetggtgt gacageacgt ecceaagete agtgetaace
                                                                     480
tccttattaa acatcccctg ctgtgactca gggaacccac atgggtactc taaaacagtc
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attcagggac cccacggggt catgtgggag ggagacagat cccagaaaga gcacaagtga
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gtcattacca aaaactccaa ggcccgcaca ccggacgcac atacccagct aggggcagac
                                                                     660
tcaaagatcc cagcccttat cttctcccca tatcagagct cggaagccag aaatcttcct
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aaggcaggtg aaagcaagcc gagccccact gctgaaggac aaagccacag gaagcctgat
                                                                     780
gacatettte etetgagget tecaaacgat caceecaaat tgettgetga taetgggaag
                                                                     840
agtggccatg aactetecat tgetetgetg getgtggaat gtttgeteag cacaggaage
                                                                     900
atttaaggag aaagtcaaag tagccaaaag gcaaaccaga tggtggtgga catgtgggtg
                                                                     960
acagagcatc ctgcatttgt tgcctcgggg tgcagcccca aagataaagc cagcagtgtg
                                                                    1020
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```
caaatgacaa atgctacccc acctcogcca ggcagccaga gccagggccg aaggacgcgg
                                                                    1080
aaaggaactg gtgtggaaac ctgcccagga accgcactct caactgagaa gagtccgggg
                                                                    1140
cgcgtccccg cccggccgcc cggctgtgaa ttccgccaca cggcctaggg tgctcgaggt
                                                                    1200
ctcgat
                                                                    1206
     <210> 884
     <211> 420
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    <221> misc_feature
    <222> (1) ... (420)
    <223> n = a,t,c or g
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                                                                     120
cggtgcagca gtattcgccc aacgggcgta tcggaaacca ctgatctcgt tccttgtcgg
                                                                     180
ettetegatg etggeggeeg gegtaaceag tgeggeggga etegeeeteg eetteteggg
                                                                     240
cgactatete aaageettea tegacgteec aaccgtteea geggegeteg tetteetget
                                                                     300
cctggtggga cttctcaatg ccagaggcat caaggagtcc atgcgcgcca ncgtcgtcat
                                                                     360
gacagtegtg gaagteaceg ggetegteet egttgtegte etegegeteg tgecaggeag
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     <210> 885
     <211> 1696
     <212> DNA
     <213> Homo sapiens
     <400> 885
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                                                                     120
gcagccaggc catggagctc tctgatgtca ccctcattga gggtgtgggt aatgaggtga
                                                                     180
tggtggtggc aggtgtggtg gtgctgattc tagccttggt cctagcttgg ctctctacct
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acgtagcaga cagcggtagc aaccagctcc tgggcgctat tgtqtcaqca qqcqacacat
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ccgtcctcca cctggggcat gtggaccacc tggtggcagg ccaaggcaac cccgagccaa
                                                                     360
ctgaactccc ccatccatca gagggtaatg atgagaaggc tgaagaggcg ggtgaaggtc
                                                                     420
ggggagactc cactggggag gctggagctg ggggtggtgt tgagcccagc cttgagcatc
                                                                     480
teettgacat ccaaggeetg cccaaaagac aagcaggtge aggcageage agtccagagg
                                                                     540
ccccctgag atctgaggat agcacctgcc tccctcccag ccctggcctc atcactgtgc
                                                                     600
ggctcaaatt cctcaatgat accgaggagc tggctgtggc taggccagag gataccgtgg
                                                                     660
gtgccctgaa gagcaaatac ttccctggac aagaaagcca gatgaaactg atctaccagg
                                                                     720
geogeetget acaagaceea geogeacae tgcgttetet gaacattace gacaactgtg
                                                                     780
tgattcactg ccaccgctca cccccagggt cagctgttcc aggcccctca gcctccttgq
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ccccctcggc cactgagcca cccagccttg gtgtcaatgt gggcagcctc atggtgcctg
                                                                     900
tetttgtggt getgttgggt gtggtetggt actteegaat caattacege caattettea
                                                                     960
cagcacctgc cactgtctcc ctggtgggag tcaccgtctt cttcagcttc ctagtatttg
                                                                    1020
ggatgtatgg acgataagga cataggaaga aaatgaaagg gtcctctgaa ggagttcaaa
                                                                    1080
gctgctggcc aagctcagtg gggagcctgg gctctgagat tccctcccac ctgtggttct
                                                                    1140
gactettece agtgteetge atgtetgeee eeageaceea gggetgeetg caagggeage
                                                                    1200
teageatgge eccageacaa eteegtaggg ageetggagt atcetteeat tteteageea
                                                                    1260
aatactcatc ttttgagact gaaatcacac tggcgggaat gaagattgtg ccagccttct
                                                                    1320
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                                                                    1380
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1440
gageteagte aggaagggga tgggggeacea agceaageee ceageattgg gageggeeag
                                                                 1500
gccacagctg ctgctcccgt agtcctcagg ctgtaagcaa gagacagcac tggcccttgg
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ggtgattatt tggctccgct catagccctg ccttcctcgg aggagccatc ggtgtcgcgt
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gcgtgtggag tatctgcaga catgactgcg tggaggagat tccagtcgct gctcctgctt
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ggcttagtcc agggtcccaa tggcactatt gagagcccag ggtttcctca cgggtatccg
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aactatgcca actgcacctg gatcatcatc acgggcgagc gcaataggat acagttgtcc
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caacaaggga atttaaaagt gagattatcg ggatttcagc tgccctcctc tatagtgagt
                                                                 540
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aactaatagc cctcttatgt ggtaaagagt tcatttttaa tgcagaagag tttcattaaa
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                                                                 1080
teatgeaagg catagagact tatttgtttt catgtettea gattttgtgc ctagatacet
                                                                 1140
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atagaacttt ggaaaaggaa attatcattt caagtattag gttttaagaa attgaactag
                                                                 1260
1320
ttttacacgt aatacaagag ctactgtctg taacagaaac tctggagtct gtaaatttaa
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aaagcaatct atcgttaggg gtgctgtatt
                                                                 1410
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    <211> 413
    <212> DNA
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    <400> 887
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                                                                 120
gctatgtaca gccataggat tgcctacaat gtttggttat attatttgtg gtgtacttct
                                                                 180
gggaccttca ggactaaata gtattaaggt aagaacaaaa ttggattgtt ttggtatctg
                                                                 240
tttaacagaa tataaaaaga gaattcatga agactaaaaa gtattgaatg tgattaatgc
                                                                 300
agataccago ttogtataaa coatttoaaa gatgtoottt caggtqtoac gggaaqtoto
                                                                 360
tgaaccetca ggaagteget gtgeetgtta gtgaagggge ggtgttaetg gaa
                                                                 413
```

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<210> 888
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     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
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     <223> n = a,t,c or q
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ataggtcaag taagtaaata gagatttaaa aaattatgaa cacaaaggaa gtaacagcct
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tectgtettg etgtagtaac tgaccatatg egtttatate atgetaattg tgeaatttat
                                                                     240
ttttgagttg gtctcaagta ttttggtttc gaatgtgaaa gatatgttag attttgaaag
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tggtttttgt agtaaaattc tcagttattt tttttcttcg ccaagataca gattaccttt
                                                                     360
cctttaagct gatcctaagg aagttatttt ttgtatacct tcagagaggg gataacatcc
                                                                     420
caaagatatt agtgttcaca gaggatggat atttcctacg agcctggaat tatacagttg
                                                                     480
acacacetea tggtatattt geagecagta etetatatga acaateegte tggateaegg
                                                                     540
atgtaggaag tggattettt ggteatactg ttaaaaaata cagttetttt ggtgatettg
                                                                     600
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                                                                     660
acccagcaga attatatgta gaggacacag gagatattta cattgtggat ggagatggag
                                                                     720
gattgaataa cagattgatc aaactgtccc aagatttcat gatcctttqg ctgcatqqaq
                                                                     780
aaaatgggac agggcctgct aagttcaaca tacctcacag tgttacactt gattcagctg
                                                                     840
gtcgggtaca aatacagcgt cattgtgtct gggaaaaaaa aaaaaaa
                                                                     887
     <210> 889
     <211> 1871
     <212> DNA
     <213> Homo sapiens
     <400> 889
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gcagccttca gcccagtgcc ccctactgag gccaaagcgg caggacccag gccttctggc
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ctccctgacc tgctcacctc cacgeggetg gccacacacg tctgccaacc ctttcctgtg
                                                                     180
ccgggggggt ttetececaa gccctgggge cageteetee aagaegetet gcccaccagt
                                                                     240
ctcaccggac ttggtgaaca ggggcagctc aggattaggg actccctgga cccaccgaa
                                                                     300
gttctaaggc ggggggcccg tgtccccaca gagcctggcc tggagccctg gaaggaggcc
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ctggtgcggc ccccaggcag ctacagcagc agcagcaaca gtggagactg gggatgggac
                                                                     420
ctggccagtg accagtecte teegtecace eegteaceee cactgeeeee egaggcagee
                                                                     480
cactttctgt ttggggagcc caccctgaga aaaaggaaga gcccggccca ggtcatgttc
                                                                     540
cagtgtctgt ggaagagctg cgggaaggtg ctgagcacgg cgtcggcgat gcagagacac
                                                                     600
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                                                                     720
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ggetgeetga egecegeeeg cetggageeg cageecaegg aggteggage etgeecaeee
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cggaaggtgt atggcatgga gcgccgggac ctctggtgca cagcctgccg ctggaagaaa
                                                                    1080
gcctgccagc ggttcctgga ctaagtccgg ctcgttcaag aacataagct accaccttct
                                                                    1140
cocteccae cccctccagg cccggggctg aaacagcccg aggacagccc caggggctgg
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cetteaceag etgeagggte tgettttact tggggtgggg gggegggget gaceetgaae
                                                                    1260
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cetececee gecaggtegg ggaggggtee caccacteaa agtgeeteta aagaaaceag
ctttttgcac taaagccaaa ccacaccgct gtccccttag ccccaagggc cctgggggca
gccaccetcc egcetgtegg cccgtagatt tateaagggt gttatgggcc cagetttggg
                                                                     1440
gggccagtcc cgatgcactt tgaggggtgt tggagagggg actcccccac tcgcacttaa
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ctcaacggct ctcgggccct ggggctgttt ttaccatgtt tgtttttgaa gctcaggtgt
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                                                                    1620
ctttgtctgc ctctcgggag gaaggccgtg gggctgggac cctgtggtgg gcaagtgggt
                                                                    1680
ggagtetgge agetgeecac agagggeega gggteaceeg teggeegeeg ceaceceagg
                                                                    1740
cgaggccgga ggaaggatca tctgagacgc aggaggcatc tgctggagca gcaatttccc
                                                                    1800
aatttattga aagtgatcgc tttgcaagga tgtctaagct aatcccgtca cagaaaggaa
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acgcacaggc g
                                                                    1871
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     <211> 379
     <212> DNA
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     <400> 890
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gacttgtctt cggtagggac agtcaagtca ggcaaaaccg tgaacttggc tacagcaggc
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acaatcaagc cgggcacagc catgaatctg actacagttg ggacaaccaa gccagggatg
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gtcatggatt tgatagcctc agaaccagac aagctgggca aagccatggc tacaagaagc
                                                                     300
acagccaaac cagatatgac cacagagggt atagccatgg attcagcaac atcagaccca
                                                                      360
gtcaagccgg acatgtatt
                                                                     379
     <210> 891
     <211> 397
     <212> DNA
     <213> Homo sapiens
     <400> 891
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                                                                     120
ccatcctggc catctatgcc ggcgtcatca agtctgcctt cgaccccccg gacatcccgg
                                                                     180
tetgeeteet ggggaacege aegetgteae ggegeagett egatgeetge gteaaggeet
                                                                     240
aeggcateca caacaactca gccacctccg cgctctgggg cctcttctgc aacggctccc
                                                                     300
ageccagege egectgtgae gagtaettea tecagaacaa egteacegaa atteagggea
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tecegggege ggecagtggt gtetteetgg agaaceg
                                                                     397
     <210> 892
     <211> 398
     <212> DNA
     <213> Homo sapiens
     <400> 892
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teagageece eggaggagea etgtggaete ggeagaggae gteeaeteee tggaeagetg
                                                                     120
tgaatacatc tgggaggttg gtgtgggctt cgctcactcc ccccagccta actacatcca
                                                                     180
cgatatgaac cggatggagc tgctgaaact gctgctgaca tgcttctccq aggccatgta
                                                                     240
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cctgcccca gctccggaaa gtggcagcac caacccatgg gttcagttct tttgttccac
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ggagaacaga catgecetge cectetteac etceeteete aacacegtgt gtgeetatga
                                                                      360
ccctgtggaa tacgggatcc cctacaacca cctgtatt
                                                                      398
     <210> 893
     <211> 397
     <212> DNA
     <213> Homo sapiens
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                                                                      120
agetggacaa gatgetggae ecceaggtgt ggegggagge agetacecag gtettetetg
                                                                      180
ccttgggcct gggctttggt ggtgtcattg ccttctccaq ctacaataag caqqacaaca
                                                                      240
actgccactt cgatgccgcc ctggtgtcct tcatcaactt cttcacgtca gtgttqqcca
                                                                      300
ccctcgtggt gtttgctgtg ctgggcttca aggccaacat catgaatgag aagtgtgtgq
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tcgagaatgc tgagaaaatc ctagggtacc gtgtatt
                                                                      397
     <210> 894
     <211> 380
     <212> DNA
     <213> Homo sapiens
     <400> 894
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atggaaccaa gaagttcatg caggagctga cggagatgct gggcttccgc ccctaccgct
                                                                      120
tetattteta catgtggaag ttegtgtete etetatqeat ggetgtgete accaeagea
                                                                      180
gcatcatcca gctgggggtc acgccccgg gctacagcgc ctggatcaag gaggaggctg
                                                                      240
cegagegeta cetgtattte eccaactggg ceatggeace cetgateace etcategteg
                                                                      300
tggcgacgct gcccatccct gtggtgttcg tcctgcggca cttccaccta atctgtgatg
                                                                      360
gctccaacac cccatqtatt
                                                                      380
     <210> 895
     <211> 389
     <212> DNA
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     <220>
     <221> misc feature
     <222> (1)...(389)
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eggttgeagg actgaeagte agettgetgg ggteeetett eeegatgeeg agggteattt
                                                                      120
atgecatgge tggtgaeggg eteettttea ggtteetgge teaegteage teetaeaeag
                                                                      180
agacaccagt ggtggcetgc atcgtgtcgg ggttcctggc agcgctcctc gcactgttgg
                                                                      240
teagettgag agacetgata gagatgatgt etateggeac geteetggee tacacettgg
                                                                      300
tetetgtetg tgtettgete ettegacace accetgagag tgacattgat ggttttgtea
                                                                      360
agttcttgtc tgaggagcac acgtgtagt
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<210> 896
     <211> 415
     <212> DNA
     <213> Homo sapiens
     <400> 896
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acacctacat tetgttaaac aaactgggac etgtgeeett tgaaqqqtta qaaqaqace
                                                                      120
caaatgggcc aaagatgggc ctcctgatga tgattctagg ccaaatattc ctgaatggca
                                                                      180
accaagccaa ggaggctgag atttgggaaa tgctctggag gatgggggtg cagcgggaaa
                                                                      240
ggaggctttc catttttggg aacccaaaga gacttctgtc tgtggagttt gtatggcagc
                                                                      300
gttacttaga ctacaggcca gtaactgact gtaaaccagt ggagtatgag tttttctggg
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gcccaagatc ccacctagaa accaccaaga tgaaaattct gaagttcatg gcgaa
                                                                      415
     <210> 897
     <211> 428
     <212> DNA
     <213> Homo sapiens
     <400> 897
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agettgacce teagaagtae catgacetgg ceaagttgaa ggtggcaate aaataceace
                                                                      120
agaaagagtt tgttgctcag cccaactgcc aacagttgct tgccaccctg tggtatgatg
                                                                      180
getteectgg atggeggegg aaacactggg tagteaaget tetaacetge atgaceattg
                                                                      240
ggttcctgtt tcccatgctg tctatagcct acctgatctc acccaggagc aaccttgqqc
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tgttcatcaa gaaacccttt atcaagttta tctgccacac agcatcctat ttgaccttcc
                                                                      360
tetetatget teteetgget teteageaca ttgteaggae agaeetteat gtacagggge
                                                                      420
cctgtatt
                                                                      428
     <210> 898
     <211> 444
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(444)
     \langle 223 \rangle n = a,t,c or q
     <400> 898
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acagcacatc aacattgaca ctctgacctc agatccccga ttgtatatga aaatttctgg
                                                                      120
caatgccatg ctacagttgg gccccttctt atattggaca tttctggctg cctttgaagg
                                                                      180
gacagtgttc ttctttggga cttactttct ttttcagact gcatccctag aagaaaatgg
                                                                      240
aaaggtatac ggaaactgga cttttggaac cattgttttt acagtcttag tattcactgt
                                                                      300
aaccctgaag cttgccttgg atacccgatt ctggacgtgg ataaatcact ttgtgatttg
                                                                      360
gggttcttta gccttctatg tatttttctc attcttctgg ggaggaatta tttggccttt
                                                                      420
teteaageaa cagagaatgg egaa
                                                                      444
```

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<210> 899
     <211> 436
     <212> DNA
     <213> Homo sapiens
     <400> 899
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tetecageaa caggtettaa acagtgggtg gaagetgtac agggatacce aggatgggga
                                                                   120
agcettteaa ggtgaacaga atgattteaa eteeageeaa ggtgggaaag aettttgeea
                                                                   180
ccaacatggg ctgtttgagc accaaaaaac ccataatggg gagaggcctt atgagttcag
                                                                   240
tgaatgtggg gaattgttta ggtacaactc caaccttatt aaatatcagc aaaatcatgc
                                                                   300
tggagaaagg ccttatgagg gcactgaata tggaaagacc tttattagaa agtccaacct
                                                                   360
agttcagcac cagaaaattc acagtgaagg ctttctttca aaaaggtctg accccattga
                                                                   420
acatcaggag tgtatt
                                                                   436
     <210> 900
     <211> 466
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(466)
     <223> n = a,t,c or g
     <400> 900
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                                                                    60
ctgggagget tetttaetta etttgtgatt etggetgaga aeggetteet eccaatteae
                                                                   120
ctgttgggcc tccgagagga ctgggatgac cgctggatca acgatgtgga agacagctac
                                                                   180
gggcagcagt ggacctatga gcagaggaaa ategtggagt tcacctgcca cacagccttc
                                                                   240
ttegteagta tegtgggggt geagtgggee gaettggtea tetgtaagae eaggaggaat
                                                                   300
teggtettee ageeggggat gaagaacaag atettgatat ttggcetett tgaagagaca
                                                                   360
gecetggetg ettteettte etactgeeet ggaatgggtg ttgetettaa gatgtateee
                                                                   420
ctcaaaccta cctggagggt ctgtgccttc ccctactctc ttctca
                                                                   466
     <210> 901
     <211> 412
     <212> DNA
    <213> Homo sapiens
     <400> 901
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tgatgtctta ggagccccct ggaattggct gtacttcatc cccctcctca tcattggagc
                                                                   180
cttctttgtt cccaccctag tcctgggagt gctttccggg gattttgcca aagagagaga
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gagagtggag acccgaaggg ctttcatgaa gctgcggcgc cagcagcaga ttgagcgtga
                                                                   300
gctgaatggc taccgtgtct ggatagccaa agcagaggaa gtcatqctcg ctgaaqaaaa
                                                                   360
tttgtatccc agtcacgcac ggccagtgaa tccgtaatca tggtcataga cc
                                                                   412
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<210> 902

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<211> 1334
     <212> DNA
     <213> Homo sapiens
     <400> 902
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gtattgcgca gcgatgcacg gccatcaagt accacttttc tcagcccatc cgcttgcgaa
                                                                     180
acatteettt taatttaace aagaceatae ageaagatga gtggeacetg etteatttaa
                                                                     240
gaagaatcac tgctggcttc ctcggcatgg ccgtagccgt ccttctctgc ggctgcattg
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tggccacagt cagtttcttc tgggaggaga gcttgaccca gcacqtqqct qqactcctqt
                                                                     360
tecteatgae agggatattt tgeaceattt ceetetgtae ttatgeegee agtatetegt
                                                                     420
atgatttgaa ccggctccca aagctaattt atagcctgcc tgctgatgtg gaacatqqtt
                                                                     480
acagetggte catettttge geetggtgea gtttaggett tattgtggea getggaggte
                                                                     540
tctgcatcgc ttatccgttt attagccgga ccaagattgc acagctaaag tctggcagag
                                                                     600
actocacggt atgactgtcc tcactgggcc tgtccacagt gcgagcgact cctgagggga
                                                                     660
acagegegga gtteaggagt ecaageacaa ageggtettt tacatteeaa eetgttgeet
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gccagccett tetggattae tgatagaaaa teatgeaaaa ceteceaace tttetaaqqa
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caagactact gtggattcaa gtgctttaat gactatttat gcgttgactg tgagaatagg
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gtatgatttc catttatttc agaaagtttg tatgtaacaa ttacccgaga gtcatttcta
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cttgcaaaag gattcgtaac aaagcqagta taattttctt gtcattgtat catgcttgtt
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aaattttaat gcagcatctt cagaacttgt cctgatggtg tcttattgtg tcagcaccaa
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atatttgtgc attatttgtg gacgttcctt gtcacaggaa gattcttctt ctqttqcctt
                                                                    1140
attgtttttt tttttttaag tctcttctct gtctttgtac tggaatcgaa atcataaqat
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aaacagatca aacgtgctta agagctaact cgtgacacta tgcagtattg tttgaagacc
                                                                    1260
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	ccgggcctag					4740
	gcatgaaccc					4800
	gggcgacaga					4860
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gactaataaa	tcacaaggtc	aggagaticga	gaccatcoto	gctaacacaa	tgaaaccccc	4980
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tactegggag getgaggeag gagaatggeg tgaacetggg aggeggaget tgeagtgage
                                                                    5100
cgagatcaca ccactgcact ccagectggg caacagagca agactctgtc tcaaaaaaaa
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agaaagatta tttgcagccg ggcgcggtgg ctcacgcggg taatcccaat actitgggag
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gccgaggcgg gcggatcacc aggttaggag atcgagacca tcctggccaa cacggtgaaa
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                                                                      120
gggcaagtac aaaacagaat taaaactccc aagggtcttg tctttacaaa agaaaaggca
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ggaggcagec cetggacage tggtcatget ggccgctccg gttggaccae gttgcataat
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cctcagtcgc atcatcacaa cgtctctgag cgttttgatg gggggagaag gggcagtgta
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cccagaggaa agtcggggga acctggctac accttgaaat gaggctatgt gtttcaaacc
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tggggacggg gtaagagagg atctgtgctt tgagcaacct gagccagagg cagaggggtg
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                                                                      600
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                                                                      660
aaaagacctg gggaaggggg tgttcccctt agcgcctggt ggggaaaggg ccatatacca
                                                                     720
tecececag geetttteag tgacatgget teggggggge ggggggtgg tggggggggg
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gggctcccaa ggctcagcac tcagctctcc ccaatcaggg tcagatccag ctccaggtat
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qqctqctatq qqqccaqttt cctcctcttq tttttqqcaq qacqqccaqq qcqqqccqq
                                                                     1020
ggaggcagag ggacagctgc tcgggctgta gggctgggtt ccaaggtaat gtcctggcgg
                                                                     1080
gagctattgc tgttccgggt agggttgtat tttctcctac gaccacgacg aaaaattctg
                                                                     1140
tetacteccg ggggcacett aaggteetca gaatggggce egggaggggg gnnttagege
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catcaaatag ggtctcagt
                                                                    1219
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     <213> Homo sapiens
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     <221> misc feature
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120

tttgagaact gacatcttta acagcagtct gccaatctat gaatatggta tatctctaca

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tttatttaga tctttttcaa ttcctcatca ctgttttgca gggttttttg tttgtttttq
                                                                     180
agatggagtt tcactcttgt cgcccaggcc agagtgcaat gatgcaatct cagctcgctq
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caacctctgc ctcccgggtt caagtgattc tcgttgtctc agcccccaa gaagctggga
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gccatgttgg ccaggctggt ctcgaactcc tgaactcagg tgatccaccc acctcggcct
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cccaaagtgc tgggattaga ggtgtgaacc actgtgcccc gcccattaat tcacttttga
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aaagcagcta tagttaatat gtaagtgaat aactggctgt gcttcaataa aacttgatct
                                                                     720
ataaaaaaat ggtggtgaag caqatttggc ctcccaattg tttcctcagc cctgacctan
                                                                     780
gettaagaat tetgttggaa attatggaga gega
                                                                     814
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     <211> 687
     <212> DNA
     <213> Homo sapiens
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     <221> misc feature
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                                                                     120
aaaattacat atttacccat gtggttatca tttccaaagc tcttcattcc tttgtctata
                                                                     180
ttccttgtgt ttttgcttat ggcgaattct tttaggattt ttaagtcaaa aaatatcttt
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                                                                     300
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coggoatest tatetttgtt cetttatatg taacgogott ttttetetet ggetetttte
                                                                     420
aagatttttc tttatatcac tggntttggg cgcgttggat atgatgtgcc ttgatatagt
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ttetteettt gtgetteggg eteaettage ttettggata eatggettta tgaeteteat
                                                                     540
tagatgtggg gaagttttag ccattatttt tctcaaatat tttatttgta ccacactctt
                                                                     600
gtetteteet ttagggatee caattacaca tagcaegeee tttggagatg geetacaget
                                                                     660
ctttttttt gtggacccgg ccggcgg
                                                                     687
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     <211> 620
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                                                                     120
gaagactaga gactattgac tgtcatacat acttttacta aatatgagta ctgttgtatt
                                                                     180
tttactattt ataaatatta aaattacata ctattaactt gcatgttttt aaacaacata
                                                                     240
taaatggtat cacattgtat tttttgcaac ttgcttttt cacttctgac tgtgttttta
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                                                                     480
aacatgtgtg agcttttctg ttctttacat aagaggagga atgattggac cttagagtac
                                                                     540
atcttcagta ttattaggga attccaaaca qctttccaaa qtcqctatat qaatttacac
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```

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                                                                      620
     <210> 915
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ggagaaca
                                                                      788
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gcctaactcc atgctctcat ttctggttgt tttccagttg gttctcttaa ggttttcagg
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aagacattca catcatcagc taataacaat tacttttcct cttttccaat ggctgtattt
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                                                                      660
agtggtcact gctgcgaggg aaggagccc caacagctcc cqtgaacctq accetqqaqa
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     <211> 2709
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<212> DNA

## <213> Homo sapiens

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                                                                     120
cctgtggtct gtgataccca tcctccttga tgttctgcag aatggcactt gactgctggg
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                                                                     240
ttetteette tgggeeette tactggtgaa ettteateaa gatetgegee atgeegtgte
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                                                                     480
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gccatagtag gggttctggg aagaggtatt tctgatttgt gggcctctgc ttgcttqact
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teaggteact tatacttett attttgettg cetgeettea teecteattt cetecetete
                                                                     720
attettettt cetecetece titteetggta geeteettte eteceettet geetteecet
                                                                     780
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                                                                    1260
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aaaaaaaa
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```
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<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;220>

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                                                                     120
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11:40

1200

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```
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tgcggagaac actggattta aataaaggtg ttatgggtat aattaactat aatttatttt
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<213> Homo sapiens

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840

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cacctggctc atcctgggca gcaaggaaca gactgtcacc atcaggttcc agaagctaca
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cetggeetgt ggeteagage gettaaceet acgeteecet etecageeae tgateteeet
                                                                     420
gtgtgaggea ceteceagee etetgeaget geeeggggge aaegteaeea teaettaeag
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agtagctggg actacaggcg cccgccacta cgcccggcta atttttgta tttttagtag
                                                                     180
agacggggtt tcaccgtttt agccgggatg gtctcgatct cctgacctcg tgatccgccc
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                                                                     360
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cccgagtagc tgggactaca ggggcccgcc accacgcccg gctaactttt tgtgttttta
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                                                                     180
aggactotgg caaagaggca totggcotgg cototootot gcotoottag ggagctoota
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ggtggccctc aggcctggcc cctgctgctg gccagctgcc tggtgcccgg ggcgctccag
                                                                     300
ctegectece tgeetetget eeetgaaage eegegetace teeteattga etgtggagae
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900

960

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geetteatee teagetttgg cattggeeet ggtgagtggg cecaagggge tetgggeate

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cgtcatcaca tagaaggagt gatgggtgcc tgggtgcaca gtgggtgggt gtgaatgcaa
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<210> 943

<211> 1026

<212> DNA

<213> Homo sapiens

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<210> 944

<211> 807

<212> DNA

<213> Homo sapiens

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ttatgattac atccaatatt ttgaaacaca tttqttqtca tctaaaaqtt cqacaqacta
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taaacacagt tgttcagaat gtctccgatt tatgaagtqt ttcttqaqca tttattqtat
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gtaggtgtaa cttttatccc cattttatgg atgaagaact taaggcttgg tgaggttgtc
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acactotogt gggttttggt agtagagotg gaagtcaaag coaagtcagt otttttattg
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gctatactaa ccacagaatt ttcattaaat cagtctttaa aaatgttttt gggccaggag
                                                                     540
tggtggttca ccctgtaatc ccaacacttt gggaggccaa ggtgggagga tcacttgagc
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                                                                     660
aaaattagcc aggtgtggta gtacgtacct gtggtcccag ttattccaga ggctgaqqat
                                                                     720
ttggcttgag cccaggaggt caagacctca atgagcttgt gccactgcac tccagcctgq
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<212> DNA

<213> Homo sapiens

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gagttagtaa ttgctcccct gttccttcac ctccccactt tggagctcag atttgttttt
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     <212> DNA
     <213> Homo sapiens
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     <221> misc feature
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                                                                     120
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ttttcggggc cttgctggag cggggagage tgtttgtggg ccagctgccc tctgaggaga
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gcatgatcgg ggccgcttct tcaccatcct ggggctggtc tgcgcgggcc agggcggctt
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                                                                     240
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                                                                     300
getggtetge tegggeeaeg aeggatteet gggettteat gggtggggea geeegtgtee
                                                                     360
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                                                                     240
eggeagegea geeggtgegt acteggeeac acceagteec teegeeageg eeacceagge
                                                                     300
ggcaaaggcc aggatcacca ggaggcctga gaagtaggtc atgttcctcc caatgcactt
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gttgatgggc ttcatgagga aggaggacaa gaagccgctg aggtacatca ccaggggaat
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ggtcgcgatg aa
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<210> 950

<211> 450

<212> DNA

<213> Homo sapiens

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<210> 953

<211> 1205

<212> DNA

<213> Homo sapiens

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<212> DNA <213> Homo sapiens

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<210> 958

<211> 1139

<212> DNA

<213> Homo sapiens

## <400> 958

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1740

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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720

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<400> 988

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<213> Homo sapiens

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            20
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35 40 45

Gln Gly Ser Val Gly His Asp Trp Ala Ala Leu Thr Phe Trp Leu Pro
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Cys Ala Leu Cys Gln Met Ala Arg Glu Leu Lys Ile Arg Glu \*
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<210> 1013 <211> 231 <212> PRT <213> Homo sapiens

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<210> 1015

<211> 112 <212> PRT <213> Homo sapiens

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<210> 1016 <211> 68 <212> PRT <213> Homo sapiens

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<210> 1018 <211> 127 <212> PRT <213> Homo sapiens

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<210> 1019 <211> 188 <212> PRT <213> Homo sapiens

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<210> 1020 <211> 65 <212> PRT <213> Homo sapiens

<210> 1021 <211> 136 <212> PRT <213> Homo sapiens

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<210> 1022 <211> 186 <212> PRT <213> Homo sapiens

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<210> 1023 <211> 186 .<212> PRT

<213> Homo sapiens

<400> 1023 Met Ala Gly Pro Arg Pro Arg Trp Arg Asp Gln Leu Leu Phe Met Ser 10 Ile Ile Val Leu Val Ile Val Ile Cys Leu Met Leu Tyr Ala Leu 25 Leu Trp Glu Ala Gly Asn Leu Thr Asp Leu Pro Asn Leu Arg Ile Gly Phe Tyr Asn Phe Cys Leu Trp Asn Glu Asp Thr Ser Thr Leu Gln Cys 50 55 60 His Gln Phe Pro Glu Leu Glu Ala Leu Gly Val Pro Arg Val Gly Leu 70 75 Gly Leu Ala Arg Leu Gly Val Tyr Gly Ser Leu Val Leu Thr Leu Phe 90 Ala Pro Gln Pro Leu Leu Ala Gln Cys Asn Ser Asp Glu Arg Ala 105 Trp Arg Leu Ala Val Gly Phe Leu Ala Val Ser Ser Val Leu Leu Ala 120 Gly Gly Leu Gly Leu Phe Leu Ser Tyr Val Trp Lys Trp Val Arg Leu 135 140 Ser Leu Pro Gly Pro Gly Phe Leu Ala Leu Gly Ser Ala Gln Ala Leu 150 155 Leu Ile Leu Leu Ile Ala Met Ala Val Phe Pro Leu Arg Ala Glu 170 Arg Ala Glu Ser Lys Leu Glu Ser Cys \*

<210> 1024 <211> 73 <212> PRT <213> Homo sapiens

<400> 1024

<210> 1025 <211> 67 <212> PRT <213> Homo sapiens

<400> 1025

<210> 1026 <211> 67 <212> PRT <213> Homo sapiens

<400> 1026

 Met
 Gln
 Ala
 Gly
 Ser
 Ala
 Leu
 Trp
 His
 Leu
 Trp
 Ala
 Gly
 Arg
 Cys

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<210> 1027
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    <212> PRT
    <213> Homo sapiens
    <400> 1027
Met Leu Cys Val Trp Ile Lys Val Leu Phe Leu Leu Ile Ala Glu Ser
1 5
Asn Thr Trp Leu Leu Ser Pro Arg Thr Lys Asp Val Leu Lys Ser Glu
    20
                            25
Pro Thr Gln Ile Tyr Pro His Thr Ser Arg Lys Gln Phe Lys Lys Pro
      35 40
Gln Glu Ser Lys His Ser Phe Ile Gly Tyr *
                     55
    <210> 1028
    <211> 46
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    <213> Homo sapiens
   <400> 1028
Met Phe Gln Val Gly Gly Arg Val Phe Lys Arg Cys Ile Phe Ser Phe
Cys Cys Cys His Phe Ile Gly Leu Gly Leu Gly Val Cys Phe Ser Ser
                            25
Leu Asn Gly Thr Arg Met Phe Ala Asp Ser Tyr Ser Val *
    35
                 40
    <210> 1029
    <211> 61
    <212> PRT
    <213> Homo sapiens
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Met Ala Phe Arg Thr Cys Phe Leu Ser Cys Leu Thr Val Val Lys Val
1 5 10
Cys Ser Lys Ala Ser Pro Ser Phe Ser Thr Gln Gln Pro Cys Val Thr
                            25
Thr Lys Val Glu Leu Ser Leu Ile Cys Cys Cys Phe Ser Ser Lys Leu
                         40
Pro Asn Lys Ala Lys Asn Thr Leu Val Phe Tyr Ser *
                     55
    <210> 1030
    <211> 50
    <212> PRT
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<213> Homo sapiens

<210> 1031 <211> 152 <212> PRT <213> Homo sapiens

<400> 1031 Met Ile Val Tyr Trp Val Leu Met Ser Asn Phe Leu Phe Asn Thr Gly 10 Lys Phe Ile Phe Asn Phe Ile His His Ile Asn Asp Thr Asp Thr Ile 25 Leu Ser Thr Asn Asn Ser Asn Pro Val Ile Cys Pro Ser Ala Gly Ser 40 Gly Gly His Pro Asp Asn Ser Ser Met Ile Phe Tyr Ala Asn Asp Thr 55 Gly Ala Gln Gln Phe Glu Lys Trp Trp Asp Lys Ser Arg Thr Val Pro 70 Phe Tyr Leu Val Gly Leu Leu Leu Pro Leu Leu Asn Phe Lys Ser Pro 85 90 Ser Phe Phe Ser Lys Phe Asn Ile Leu Gly Ile Asn Asn Gln Val Ile 105 Leu Pro Gly Val Thr Glu Met Pro Gly Tyr Cys Pro Phe Leu Leu Pro 115 120 125 Val Ser Thr Glu Cys Cys Ala Val Ala Thr Ser Tyr Thr Cys Phe Glu 130 135 Glu Lys Asn Ile Gly Gln Cys Cys

150 152

<210> 1032 <211> 1764 <212> PRT <213> Homo sapiens

65					70					75					80
			Met	85					90				_	95	
Gln	Ile	Leu	Gln 100	Ile	Leu	Thr	Val	Gln 105	Ala	Gln	Leu	Arg	Ala 110	Ser	Pro
		115	Pro				120			_		125			
Arg	Val 130	Ala	Met	Leu	Arg	Leu 135	Leu	Thr	Trp	Val	Ile 140	Gly	Thr	Gly	Ser
145			Gln		150			_		155				_	160
			Gly	165					170					175	
			Leu 180					185					190	_	
		195	Arg				200					205			
	210		Glu			215					220				
225			Asp		230					235				_	240
			Met	245					250					255	
			Val 260					265					270	_	
		275	Ser				280					285			
	290		Arg			295					300				
305			Leu		310					315					320
			Glu	325					330					335	
			Leu 340					345					350		
		355	Ala				360					365	_	_	
	370		Ala -			375					380	_			
385			Leu		390					395					400
		_	Tyr	405					410					415	•
			Lys 420					425					430		
		435	Leu				440					445			
	450		Ala			455					460			_	
465			Gly		470					475					480
			Ala	485					490					495	
			Leu 500					505					510		
		515	qaA				520					525			
Gly	Ala 530	Leu	Phe	Ala	Phe	Glu 535	Met	Leu	Cys	Thr	Met 540	Leu	Gly	Lys	Leu

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Phe Glu Pro Tyr Val Val His Val Leu Pro His Leu Leu Cys Phe
                  550
Gly Asp Gly Asn Gln Tyr Val Arg Glu Ala Ala Asp Asp Cys Ala Lys
             565
                                 570
Ala Val Met Ser Asn Leu Ser Ala His Gly Val Lys Leu Val Leu Pro
          580
                             585
Ser Leu Leu Ala Ala Leu Glu Glu Glu Ser Trp Arg Thr Lys Ala Gly
                         600
Ser Val Glu Leu Leu Gly Ala Met Ala Tyr Cys Ala Pro Lys Gln Leu
                     615
                                        620
Ser Ser Cys Leu Pro Asn Ile Val Pro Lys Leu Thr Glu Val Leu Thr
               630
                           635
Asp Ser His Val Lys Val Gln Lys Ala Gly Gln Gln Ala Leu Arg Gln
               645
                                 650
Ile Gly Ser Val Ile Arg Asn Pro Glu Ile Leu Ala Ile Ala Pro Val
                             665
Leu Leu Asp Ala Leu Thr Asp Pro Ser Arg Lys Thr Gln Lys Cys Leu
                          680
Gln Thr Leu Leu Asp Thr Lys Phe Val His Phe Ile Asp Ala Pro Ser
                   695
Leu Ala Leu Ile Met Pro Ile Val Gln Arg Ala Phe Gln Asp Arg Ser
                  710
                                     715
Thr Asp Thr Arg Lys Met Ala Ala Gln Ile Ile Gly Asn Met Tyr Ser
                                 730
              725
Leu Thr Asp Gln Lys Asp Leu Ala Pro Tyr Leu Pro Ser Val Thr Pro
                   745
Gly Leu Lys Ala Ser Leu Leu Asp Pro Val Pro Glu Val Arg Thr Val
                         760
Ser Ala Lys Ala Leu Gly Ala Met Val Lys Gly Met Gly Glu Ser Cys
         775
Phe Glu Asp Leu Leu Pro Trp Leu Met Glu Thr Leu Thr Tyr Glu Gln
          790
                                     795
Ser Ser Val Asp Arg Ser Gly Ala Ala Gln Gly Leu Ala Glu Val Met
              805
                                 810
Ala Gly Leu Gly Val Glu Lys Leu Glu Lys Leu Met Pro Glu Ile Val
                             825
Ala Thr Ala Ser Lys Val Asp Ile Ala Pro His Val Arg Asp Gly Tyr
                          840
Ile Met Met Phe Asn Tyr Leu Pro Ile Thr Phe Gly Asp Lys Phe Thr
                      855
                                         860
Pro Tyr Val Gly Pro Ile Ile Pro Cys Ile Leu Lys Ala Leu Ala Asp
                  870
                                     875
Glu Asn Glu Phe Val Arg Asp Thr Ala Leu Arg Ala Gly Gln Arg Val
                                 890
Ile Ser Met Tyr Ala Glu Thr Ala Ile Ala Leu Leu Leu Pro Gln Leu
           900
                              905
Glu Gln Gly Leu Phe Asp Asp Leu Trp Arg Ile Arg Phe Ser Ser Val
                         920
Gln Leu Leu Gly Asp Leu Leu Phe His Ile Ser Gly Val Thr Gly Lys
                     935
                                         940
Met Thr Thr Glu Thr Ala Ser Glu Asp Asp Asn Phe Gly Thr Ala Gln
                 950
                                     955
Ser Asn Lys Ala Ile Ile Thr Ala Leu Gly Val Glu Arg Arg Asn Arg
              965
                                 970
Val Leu Ala Gly Leu Tyr Met Gly Arg Ser Asp Thr Gln Leu Val Val
                             985
Arg Gln Ala Ser Leu His Val Trp Lys Ile Val Val Ser Asn Thr Pro
               1000
                                          1005
Arg Thr Leu Arg Glu Ile Leu Pro Thr Leu Phe Gly Leu Leu Gly
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1015 Phe Leu Ala Ser Thr Cys Ala Asp Lys Arg Thr Ile Ala Ala Arg Thr 1025 1030 1035 1040 Leu Gly Asp Leu Val Arg Lys Leu Gly Glu Lys Ile Leu Pro Glu Ile 1045 1050 1055 Ile Pro Ile Leu Glu Glu Gly Leu Arg Ser Gln Lys Ser Asp Glu Arg 1060 1065 1070 Gln Gly Val Cys Ile Gly Leu Ser Glu Ile Met Lys Ser Thr Ser Arg 1075 1080 1085 Asp Ala Val Leu Tyr Phe Ser Glu Ser Leu Val Pro Thr Ala Arg Lys 1090 1095 1100 Ala Leu Cys Asp Pro Leu Glu Glu Val Arg Glu Ala Ala Ala Lys Thr 1105 1110 1115 1120 Phe Glu Gln Leu His Ser Thr Ile Gly His Gln Ala Leu Glu Asp Ile 1125 1130 1135 Leu Pro Phe Leu Leu Lys Gln Leu Asp Asp Glu Glu Val Ser Glu Phe 1140 1145 1150 Ala Leu Asp Gly Leu Lys Gln Val Met Ala Ile Lys Ser Arg Val Val 1155 1160 1165 Leu Pro Tyr Leu Val Pro Lys Leu Thr Thr Pro Pro Val Asn Thr Arq 1170 1175 1180 Val Leu Ala Phe Leu Ser Ser Val Ala Gly Asp Ala Leu Thr Arq His 1185 . 1190 . 1195 Leu Gly Val Ile Leu Pro Ala Val Met Leu Ala Leu Lys Glu Lys Leu 1205 1210 1215 Gly Thr Pro Asp Glu Gln Leu Glu Met Ala Asn Cys Gln Ala Val Ile 1220 1225 1230 Leu Ser Val Glu Asp Asp Thr Gly His Arg Ile Ile Ile Glu Asp Leu 1235 1240 1245 Leu Glu Ala Thr Arg Ser Pro Glu Val Gly Met Arg Gln Ala Ala Ala 1250 1255 1260 Ile Ile Leu Asn Ile Tyr Cys Ser Arg Ser Lys Ala Asp Tyr Thr Ser 1265 1270 1275 1280 His Leu Arg Ser Leu Val Ser Gly Leu Ile Arg Leu Phe Asn Asp Ser 1285 1290 1295 Ser Pro Val Val Leu Glu Glu Ser Trp Asp Ala Leu Asn Ala Ile Thr 1300 1305 1310 Lys Lys Leu Asp Ala Gly Asn Gln Leu Ala Leu Ile Glu Glu Leu His 1315 1320 1325 Lys Glu Ile Arg Leu Ile Gly Asn Glu Ser Lys Gly Glu His Val Pro 1330 1335 1340 Gly Phe Cys Leu Pro Lys Lys Gly Val Thr Ser Ile Leu Pro Val Leu 1345 1350 1355 1360 Arg Glu Gly Val Leu Thr Gly Ser Pro Glu Gln Lys Glu Glu Ala Ala 1365 1370 Lys Ala Leu Gly Leu Val Ile Arg Leu Thr Ser Ala Asp Ala Leu Arg 1385 1390 Pro Ser Val Val Ser Ile Thr Gly Pro Leu Ile Arg Ile Leu Gly Asp 1400 1405 Arg Phe Ser Trp Asn Val Lys Ala Ala Leu Leu Glu Thr Leu Ser Leu 1410 1415 1420 Leu Leu Ala Lys Val Gly Ile Ala Leu Lys Pro Phe Leu Pro Gln Leu 1425 1430 1435 1440 Gln Thr Thr Phe Thr Lys Ala Leu Gln Asp Ser Asn Arg Gly Val Arg 1445 1450 1455 Leu Lys Ala Ala Asp Ala Leu Gly Lys Leu Ile Ser Ile His Ile Lys 1460 1465 1470 Val Asp Pro Leu Phe Thr Glu Leu Leu Asn Gly Ile Arg Ala Met Glu 1475 1480

Asp Pro Gly Val Arg Asp Thr Met Leu Gln Ala Leu Arg Phe Val Ile 1495 Gln Gly Ala Gly Ala Lys Val Asp Ala Val Ile Arg Lys Asn Ile Val 1510 1515 1520 Ser Leu Leu Ser Met Leu Gly His Asp Glu Asp Asn Thr Arg Ile 1525 1530 Ser Ser Ala Gly Cys Leu Gly Glu Leu Cys Ala Phe Leu Thr Glu Glu 1540 1545 Glu Leu Ser Ala Val Leu Gln Gln Cys Leu Leu Ala Asp Val Ser Gly 1555 1560 . 1565 Ile Asp Trp Met Val Arg His Gly Arg Ser Leu Ala Leu Ser Val Ala 1570 1575 1580 Val Asn Val Ala Pro Gly Arg Leu Cys Ala Gly Arg Tyr Ser Ser Asp 1590 1595 Val Gln Glu Met Ile Leu Ser Ser Ala Thr Ala Asp Arg Ile Pro Ile 1605 1610 1615 Ala Val Ser Gly Val Arg Gly Met Gly Phe Leu Met Arg His His Ile 1625 1630 1620 Glu Thr Gly Gly Gln Leu Pro Ala Lys Leu Ser Ser Leu Phe Val 1635 1640 1645 Lys Cys Leu Gln Asn Pro Ser Ser Asp Ile Arg Leu Val Ala Glu Lys 1650 1655 1660 Met Ile Trp Trp Ala Asn Lys Asp Pro Leu Pro Pro Leu Asp Pro Gln 1665 1670 1675 1680 Ala Ile Lys Pro Ile Leu Lys Ala Leu Leu Asp Asn Thr Lys Asp Lys 1685 1690 1695 Asn Thr Val Val Arg Ala Tyr Ser Asp Gln Ala Ile Val Asn Leu Leu 1700 1705 1710 Lys Met Arg Gln Gly Glu Glu Val Phe Gln Ser Leu Ser Lys Ile Leu 1715 · 1720 1725 Asp Val Ala Ser Leu Glu Val Leu Asn Glu Val Asn Arg Arg Ser Leu 1730 1735 1740 Lys Lys Leu Ala Ser Gln Ala Asp Ser Thr Glu Gln Val Asp Asp Thr 1750 1755 Ile Leu Thr \* 1763

<210> 1033 <211> 151 <212> PRT

<213> Homo sapiens

<400> 1033

 Met
 Asn
 Arg
 Arg
 Ala
 Ser
 Gln
 Met
 Leu
 Leu
 Met
 Leu
 Ale
 Ile
 Ala
 Ile
 Ile</th

<210> 1034 <211> 149 <212> PRT <213> Homo sapiens

<400> 1034 Met Ala Leu Leu Pro Arg Trp Phe Arg Glu Ala Pro Val Leu Phe 10 Ser Thr Gly Trp Ser Pro Leu Asp Val Leu Leu His Ser Leu Leu Thr 25 Gln Pro Ile Phe Leu Ala Gly Leu Ser Gly Phe Leu Leu Glu Asn Thr Ile Pro Gly Thr Gln Leu Glu Arg Gly Leu Gly Gln Gly Leu Pro Ser 55 Pro Phe Thr Ala Gln Glu Ala Arg Met Pro Gln Lys Pro Arg Glu Lys 70 75 Ala Ala Gln Val Tyr Arg Leu Pro Phe Pro Ile Gln Asn Leu Cys Pro 85 90 Cys Ile Pro Gln Pro Leu His Cys Leu Cys Pro Leu Pro Glu Asp Pro 105 110 Gly Asp Glu Glu Gly Gly Ser Ser Glu Pro Glu Glu Met Ala Asp Leu 115 120 125 Leu Pro Gly Ser Gly Glu Pro Cys Pro Glu Ser Thr Arg Glu Gly Val Arg Ser Gln Lys \* 145 148

<210> 1035 <211> 88 <212> PRT <213> Homo sapiens

<210> 1036 <211> 96 <212> PRT <213> Homo sapiens

<400> 1036 Met Val Val Leu Ile Pro Val Ser Trp Val Ala Asn Ala Ile Ile Arg 1 5 10 Asp Phe Tyr Asn Ser Ile Val Asn Val Ala Gln Lys Arg Glu Leu Gly 20 25 Glu Ala Leu Tyr Leu Gly Trp Thr Thr Ala Leu Val Leu Ile Val Gly 40 Gly Ala Leu Phe Cys Cys Val Phe Cys Cys Asn Glu Lys Ser Ser Ser 55 Tyr Arg Tyr Ser Ile Pro Ser His Arg Thr Thr Gln Lys Ser Tyr His 70 75 80 Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser Arg Ser Gln Tyr Val \* 85

<210> 1037 <211> 139 <212> PRT <213> Homo sapiens

<400> 1037 Met Ala Leu Ser Trp Met Thr Ile Val Val Pro Leu Leu Thr Phe Glu 5 10 Ile Leu Leu Val His Lys Leu Asp Gly His Asn Ala Phe Ser Cys Ile 25 Pro Ile Phe Val Pro Leu Trp Leu Ser Leu Ile Thr Leu Met Ala Thr Thr Phe Gly Gln Lys Gly Gly Asn His Trp Trp Phe Gly Ile Arg Lys 55 Asp Phe Cys Gln Phe Leu Leu Glu Ile Phe Pro Phe Leu Arg Glu Tyr 70 Gly Asn Ile Ser Tyr Asp Leu His His Glu Asp Asn Glu Glu Thr Glu 90 85 Glu Thr Pro Val Pro Glu Pro Pro Lys Ile Ala Pro Met Phe Arg Lys 105 110 Lys Ala Arg Val Val Ile Thr Gln Ser Pro Gly Lys Tyr Val Leu Pro 120 Pro Pro Lys Leu Asn Ile Glu Met Pro Asp \* 130 135 138

<210> 1038 <211> 64 <212> PRT <213> Homo sapiens

<210> 1039 <211> 286 <212> PRT <213> Homo sapiens

<400> 1039

Met Met Leu Gly Pro Val Thr Leu His Leu Val Gly His'Leu Leu Ala 10 Phe Leu Asp Leu Leu Cys Pro Arg Gly Pro Ile His Ser Ile Leu Pro Met Thr Phe Glu Ala Val Lys Gln Asp His Gly Phe Met Leu Tyr Arg 40 Thr Tyr Met Thr His Thr Ile Phe Glu Pro Thr Pro Phe Trp Val Pro 55 Asn Asn Gly Val His Asp Arg Ala Tyr Val Met Val Asp Gly Val Phe 75 Gln Gly Val Val Glu Arg Asn Met Arg Asp Lys Leu Phe Leu Thr Gly Lys Leu Gly Ser Lys Leu Asp Ile Leu Val Glu Asn Met Gly Arg Leu 100 105 110 Ser Phe Gly Ser Asn Ser Ser Asp Phe Lys Gly Leu Leu Lys Pro Pro 115 120 125 Ile Leu Gly Gln Thr Ile Leu Thr Gln Trp Met Met Phe Pro Leu Lys 140 135 Ile Asp Asn Leu Val Lys Trp Trp Phe Pro Leu Gln Leu Pro Lys Trp 150 155 Pro Tyr Pro Gln Ala Pro Ser Gly Pro Thr Phe Tyr Ser Lys Thr Phe 170 Pro Ile Leu Gly Ser Val Gly Asp Thr Phe Leu Tyr Leu Pro Gly Trp 185 Thr Lys Gly Gln Val Trp Ile Asn Gly Phe Asn Leu Gly Arg Tyr Trp 200 Thr Lys Gln Gly Pro Gln Gln Thr Leu Tyr Val Pro Arg Phe Leu Leu 215 220 Phe Pro Arg Gly Ala Leu Asn Lys Ile Thr Leu Leu Glu Leu Glu Asp 230 Val Pro Leu Gln Pro Gln Val Gln Phe Leu Asp Lys Pro Ile Leu Asn 245 250 Ser Thr Ser Thr Leu His Arg Thr His Ile Asn Ser Leu Ser Ala Asp 260 265 270 Thr Leu Ser Ala Ser Glu Pro Met Glu Leu Ser Gly His \* 280

<210> 1040

<211> 96 <212> PRT <213> Homo sapiens

<210> 1041 <211> 64 <212> PRT <213> Homo sapiens

<210> 1042 <211> 415 <212> PRT <213> Homo sapiens

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Asn Asn Cys Phe Ser Asp Ala Ile Val Val Cys Leu Thr Asn Cys Leu
                    120
                           125
Thr Ser Val Phe Ala Gly Phe Ala Ile Phe Ser Ile Leu Gly His Met
                 135
Ala His Ile Ser Gly Lys Glu Val Ser Gln Val Val Lys Ser Gly Phe
               150
                               155
Asp Leu Ala Phe Ile Ala Tyr Pro Glu Ala Leu Ala Gln Leu Pro Gly
            165
                            170 175
Gly Pro Phe Trp Ser Ile Leu Phe Phe Phe Met Leu Leu Thr Leu Gly
        180 185
Leu Asp Ser Gln Phe Ala Ser Ile Glu Thr Ile Thr Thr Ile Gln
     195
                     200
Asp Leu Phe Pro Lys Val Met Lys Lys Met Arg Val Pro Ile Thr Leu
                215
                                  220
Gly Cys Cys Leu Val Leu Phe Leu Leu Gly Leu Val Cys Val Thr Gln
                    235
              230
Ala Gly Ile Tyr Trp Val His Leu Ile Asp His Phe Cys Ala Gly Trp
                            250
Gly Ile Leu Ile Ala Ala Ile Leu Glu Leu Val Gly Ile Ile Trp Ile
      260
                         265
Tyr Gly Gly Asn Arg Phe Ile Glu Asp Thr Glu Met Met Ile Gly Ala
     275 280
Lys Arg Trp Ile Phe Trp Leu Trp Trp Arg Ala Cys Trp Phe Val Ile
       295
Thr Pro Ile Leu Leu Ile Ala Ile Phe Ile Trp Ser Leu Val Gln Phe
       310 315
His Arg Pro Asn Tyr Gly Ala Ile Pro Tyr Pro Asp Trp Gly Val Ala
                 330 335
Leu Gly Trp Cys Met Ile Val Phe Cys Ile Ile Trp Ile Pro Ile Met
        340 345
Ala Ile Ile Lys Ile Ile Gln Ala Lys Gly Asn Ile Phe Gln Arg Leu
      355 360
Ile Ser Cys Cys Arg Pro Ala Ser Asn Trp Gly Pro Tyr Leu Glu Gln
  370 · 375 380
His Arg Gly Glu Arg Tyr Lys Asp Met Val Asp Pro Lys Lys Glu Ala
385 390
                         395
Asp His Glu Ile Pro Thr Val Ser Gly Ser Arg Lys Pro Glu *
            405
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<210> 1043 <211> 48

<212> PRT

<213> Homo sapiens

<400> 1043

<210> 1044

<211> 146 <212> PRT <213> Homo sapiens

<400> 1044 Met Leu Phe Ser Ser Met Thr Leu Arg Leu Ser Arg Cys Ser Cys Ser Ile Leu Leu Phe Trp Ala Ser Ala Ala Cys Met Phe Pro Ser Ser Arg 25 Tyr Leu Trp Ser Gly Arg Ser Leu Val Ser Val Glu Gly Ser Asp Arg 40 Phe Ser Ser Ala Val Ser Ser Phe Ser Ser Lys Ala Asn Trp Val Lys 55 Pro Lys Phe Arg Ser Trp Ser Gly Gly Ile Glu Leu Gly Phe Gln Met 70 75 His Trp Pro Pro Gly Val Gly Pro Arg Tyr Ser Pro Ser Cys His Phe Pro Lys Ser Arg Trp Arg Thr Arg Pro Leu Arg Leu Ser Thr Ala Pro 105 Cys Thr Ser Trp Thr Leu Glu Leu Gln Tyr Leu Ala Leu Gln Lys Val 120 125 Ile Leu Gln Trp Gln Glu Leu Ser Cys Val Phe Arg Met Ser Thr Ser 135 145

<210> 1045 <211> 53 <212> PRT <213> Homo sapiens

<210> 1046 <211> 407 <212> PRT <213> Homo sapiens

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                                              45
Ser Arg His Ala Ala Glu Leu Arg Asp Phe Lys Asn Lys Met Leu Pro
                                          60
Leu Leu Glu Val Ala Glu Lys Glu Arg Glu Ala Leu Arg Thr Glu Ala
Asp Thr Ile Ser Gly Arg Val Asp Arg Leu Glu Arg Glu Val Asp Tyr
               85
                                  90
Leu Glu Thr Gln Asn Pro Ala Leu Pro Cys Val Glu Phe Asp Glu Lys
                             105
Val Thr Gly Gly Pro Gly Thr Lys Gly Lys Gly Arg Arg Asn Glu Lys
                          120
                                             125
Tyr Asp Met Val Thr Asp Cys Gly Tyr Thr Ile Ser Gln Val Arg Ser
                      135
                                         140
Met Lys Ile Leu Lys Arg Phe Gly Gly Pro Ala Gly Leu Trp Thr Lys
                  150
                                     155
Asp Pro Leu Gly Gln Thr Glu Lys Ile Tyr Val Leu Asp Gly Thr Gln
                                 170
Asn Asp Thr Ala Phe Val Phe Pro Arg Leu Arg Asp Phe Thr Leu Ala
                             185
Met Ala Ala Arg Lys Ala Ser Arg Val Arg Val Pro Phe Pro Trp Val
                          200
Gly Thr Gly Gln Leu Val Tyr Gly Gly Phe Leu Tyr Phe Ala Arg Arg
                      215
                                        220
Pro Pro Gly Arg Pro Gly Gly Gly Glu Met Glu Asn Thr Leu Gln
                  230
                                     235
Leu Ile Lys Phe His Leu Ala Asn Arg Thr Val Val Asp Ser Ser Val
              245
                                  250
Phe Pro Ala Glu Gly Leu Ile Pro Pro Tyr Gly Leu Thr Ala Asp Thr
                              265
                                                270
Tyr Ile Asp Leu Ala Ala Asp Glu Glu Gly Leu Trp Ala Val Tyr Ala
                          280
Thr Arg Glu Asp Asp Arg His Leu Cys Leu Ala Lys Leu Asp Pro Gln
                      295
                                         300
Thr Leu Asp Thr Glu Gln Gln Trp Asp Thr Pro Cys Pro Arg Glu Asn
                  310
                                  315
Ala Glu Ala Ala Phe Val Ile Cys Gly Thr Leu Tyr Val Val Tyr Asn
                                 330 335
Thr Arg Pro Ala Ser Arg Ala Arg Ile Gln Cys Ser Phe Asp Ala Ser
                             345
Gly Thr Leu Thr Pro Glu Arg Ala Ala Leu Pro Tyr Phe Pro Arg Arg
                         360 365
Tyr Gly Ala His Ala Ser Leu Arg Tyr Asn Pro Arg Glu Arg Gln Leu
                      375
                                      380
Tyr Ala Trp Asp Asp Gly Tyr Gln Ile Val Tyr Lys Leu Glu Met Arg
                  390
                                     395
Lys Lys Glu Glu Glu Val
               405 406
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<210> 1047 <211> 268 <212> PRT <213> Homo sapiens

Tyr Leu Leu Phe Met Ile Gly Tyr Ala Ser Ala Leu Val Ser Leu Leu 25 Asn Pro Cys Ala Asn Met Lys Val Cys Asn Glu Asp Gln Thr Asn Cys 40 Thr Val Pro Thr Tyr Pro Ser Cys Arg Asp Ser Glu Thr Phe Ser Thr Phe Leu Leu Asp Leu Phe Lys Leu Thr Ile Gly Met Gly Asp Leu Glu 75 80 Met Leu Ser Ser Thr Lys Tyr Pro Val Val Phe Ile Ile Leu Leu Val Thr Tyr Ile Ile Leu Thr Phe Val Leu Leu Leu Asn Met Leu Ile Ala 100 105 110 Leu Met Gly Glu Thr Val Gly Gln Val Ser Lys Glu Ser Lys His Ile 120 Trp Lys Leu Gln Trp Ala Thr Thr Ile Leu Asp Ile Glu Arg Ser Phe 135 Pro Val Phe Leu Arg Lys Ala Phe Arg Ser Gly Glu Met Val Thr Val 150 155 160 Gly Lys Ser Ser Asp Gly Thr Pro Asp Arg Arg Trp Cys Phe Arg Val 165 170 Asp Glu Val Asn Trp Ser His Trp Asn Gln Asn Leu Gly Ile Ile Asn 185 Glu Asp Pro Gly Lys Asn Glu Thr Tyr Gln Tyr Tyr Gly Phe Ser His 200 Thr Val Gly Arg Leu Arg Arg Asp Arg Trp Ser Ser Val Val Pro Arg 210 215 Val Val Glu Leu Asn Lys Asn Ser Asn Pro Asp Glu Val Val Pro 230 235 Leu Asp Ser Met Gly Asn Pro Arg Cys Asp Gly His Gln Gln Gly Tyr 245 250 Pro Arg Lys Trp Arg Thr Asp Asp Ala Pro Leu \* 265 267

<210> 1048 <211> 59 <212> PRT

<213> Homo sapiens

<210> 1049 <211> 77 <212> PRT <213> Homo sapiens

<210> 1050 <211> 474 <212> PRT <213> Homo sapiens

<400> 1050

Met Arg Ala Leu Val Leu Leu Gly Cys Leu Leu Ala Ser Leu Leu Phe Ser Gly Gln Ala Glu Glu Thr Glu Asp Ala Asn Glu Glu Ala Pro Leu 25 Arg Asp Arg Ser His Ile Glu Lys Thr Leu Met Leu Asn Glu Asp Lys 40 Pro Ser Asp Asp Tyr Ser Ala Val Leu Gln Arg Leu Arg Lys Ile Tyr His Ser Ser Ile Lys Pro Leu Glu Gln Ser Tyr Lys Tyr Asn Glu Leu 65 70 Arg Gln His Glu Ile Thr Asp Gly Glu Ile Thr Ser Lys Pro Met Val 85 90 Leu Phe Leu Gly Pro Trp Ser Val Gly Lys Ser Thr Met Ile Asn Tyr 105 Leu Leu Gly Leu Glu Asn Thr Arg Tyr Gln Leu Tyr Thr Gly Ala Glu 115 120 Pro Thr Thr Ser Glu Phe Thr Val Leu Met His Gly Pro Lys Leu Lys 130 135 Thr Ile Glu Gly Ile Val Met Ala Ala Asp Ser Ala Arg Ser Phe Ser 150 155 Pro Leu Glu Lys Phe Gly Gln Asn Phe Leu Glu Lys Leu Ile Gly Ile 170 Glu Val Pro His Lys Leu Leu Glu Arg Val Thr Phe Val Asp Thr Pro 185 Gly Ile Ile Glu Asn Arg Lys Gln Gln Glu Arg Gly Tyr Pro Phe Asn 200 Asp Val Cys Gln Trp Phe Ile Asp Arg Ala Asp Leu Ile Phe Val Val 215 Phe Asp Pro Thr Lys Leu Asp Val Gly Leu Glu Leu Glu Met Leu Phe 230 235 Arg Gln Leu Lys Gly Arg Glu Ser Gln Ile Arg Ile Ile Leu Asn Lys 245 250 Ala Asp Asn Leu Ala Thr Gln Met Leu Met Arg Val Tyr Gly Ala Leu 265 Phe Trp Ser Leu Ala Pro Leu Ile Asn Val Thr Glu Pro Pro Arg Val 275 280 285 Tyr Val Ser Ser Phe Trp Pro Gln Glu Tyr Lys Pro Asp Thr His Gln 295 300

Glu Leu Phe Leu Gln Glu Glu Ile Ser Leu Leu Glu Asp Leu Asn Gln \_ 310 Val Ile Glu Asn Arg Leu Glu Asn Lys Ile Ala Phe Ile Arg Gln His 325 Ala Ile Arg Val Arg Ile His Ala Leu Leu Val Asp Arg Tyr Leu Gln 345 Thr Tyr Lys Asp Lys Met Thr Phe Phe Ser Asp Gly Glu Leu Val Phe 360 Lys Asp Ile Val Glu Asp Pro Asp Lys Phe Tyr Ile Phe Lys Thr Ile 370 375 Leu Ala Lys Thr Asn Val Ser Lys Phe Asp Leu Pro Asn Arg Glu Ala 390 395 Tyr Lys Asp Phe Phe Gly Ile Asn Pro Ile Ser Ser Phe Lys Leu Leu 405 410 Ser Gln Gln Cys Ser Tyr Met Gly Gly Cys Phe Leu Glu Lys Ile Glu 420 425 Arg Ala Ile Thr Gln Glu Leu Pro Gly Leu Leu Gly Ser Leu Gly Leu 440 Gly Lys Asn Pro Gly Ala Leu Asn Cys Asp Lys Thr Gly Cys Ser Glu 455 Thr Pro Lys Asn Arg Tyr Arg Lys His \* 470 473

<210> 1051

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1051

<210> 1052

<211> 233

<212> PRT

<213> Homo sapiens

<400> 1052

 Met
 Ala
 Trp
 Thr
 Pro
 Leu
 Trp
 Leu
 Thr
 Leu
 Arg
 Ile
 Lys
 Cys
 Gln
 Gly
 Asp
 Thr
 Ile
 Arg
 Ser

 Tyr
 Tyr
 Ala
 Ser
 Trp
 Tyr
 Gln
 Gln
 Lys
 Pro
 Gly
 Gln
 Arg
 Pro

 Tyr
 Tyr
 Ala
 Ser
 Trp
 Tyr
 Gln
 Gln
 Lys
 Pro
 Gly
 Gln
 Arg
 Pro

 Tyr
 Tyr
 Ala
 Asn
 Arg
 Pro
 Ser
 Gly
 Ile
 Pro
 Gly
 Ile
 Pro
 Ile
 Pro
 Ile
 Leu
 Ile
 I

85 90 Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Cys Ser Tyr Ala Gly Arg 100 105 110 Thr Thr Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln 115 120 Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu 130 135 140 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr 145 150 155 Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys 165 170 175 Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr 180 185 190 Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His 195 200 205 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys 210 215 Thr Val Ala Pro Thr Glu Cys Ser \* 225 230 232

<210> 1053 <211> 147 <212> PRT <213> Homo sapiens

<400> 1053

Met Gly Ala Asp Arg Gly Pro His Val Val Leu Trp Thr Leu Ile Cys 10 Leu Pro Val Val Phe Ile Leu Ser Phe Val Val Ser Phe Tyr Tyr Gly 25 Thr Ile Thr Trp Tyr Asn Ile Phe Leu Val Tyr Asn Glu Glu Arg Thr 40 Phe Trp His Lys Ile Ser Tyr Cys Pro Cys Leu Val Leu Phe Tyr Pro 50 55 Val Leu Ile Met Ala Met Ala Ser Ser Leu Gly Leu Tyr Ala Ala Val Val Gln Leu Ser Trp Ser Trp Glu Ala Trp Trp Gln Ala Ala Arg Asp 85 90 Met Glu Lys Gly Phe Cys Gly Trp Leu Cys Ser Lys Leu Gly Leu Glu 100 105 110 Asp Cys Ser Pro Tyr Ser Ile Val Glu Leu Leu Glu Ser Asp Asn Ile 120 125 Ser Ser Thr Leu Ser Asn Lys Asp Pro Ile Gln Glu Val Glu Thr Ser 135 140 Thr Val \* 145 146

<210> 1054 <211> 123 <212> PRT <213> Homo sapiens

<400> 1054

Met Tyr Val Thr Leu Val Phe Arg Val Lys Gly Ser Arg Leu Val Lys 5 10 Pro Ser Leu Cys Leu Ala Leu Leu Cys Pro Ala Phe Leu Val Gly Val 20 25 Val Arg Val Ala Glu Tyr Arg Asn His Trp Ser Asp Val Leu Ala Gly Phe Leu Thr Gly Ala Ala Ile Ala Thr Phe Leu Val Thr Cys Val Val His Asn Phe Gln Ser Arg Pro Pro Ser Gly Arg Arg Leu Ser Pro Trp 70 Glu Asp Leu Gly Gln Ala Pro Thr Met Asp Ser Pro Leu Glu Lys Asn 85 90 Pro Arg Ser Ala Gly Arg Ile Arg His Arg His Gly Ser Pro His Pro 100 105 Ser Arg Arg Thr Ala Pro Ala Val Ala Thr \* 115 120 122

<210> 1055 <211> 122 <212> PRT <213> Homo sapiens

<400> 1055 Met Leu Thr Cys Leu Phe Ser Phe Gln Gly Cys Trp Arg Ala Arg Gly 10 Trp Gln Arg Leu Cys Glu Gly Arg Arg Gly Trp Pro Gly Val Gly Gln 25 Arg Thr Leu Lys Val Ser Glu Pro Ala Pro Leu Arg Val Gly Arg Ala 40 . Leu Pro Gln Ala Leu Leu Gly Ala Arg Pro His Cys Val Phe Pro Gly 50 55 Gly Glu Val Leu Gly Val Glu Ala Ala Phe Gly Ser Ser Phe Ile Leu 70 75 Ser Thr Phe Phe Leu His Gln Pro Leu Phe Phe Pro Gly Pro Lys Leu 90 Arg Ala Thr Gln Tyr Leu Ile Ser Ser Asp Pro Thr His Leu Pro Ala 100 105 Gly Arg Gly Pro Asn Ser Val Ser Met 115 120 121

<210> 1056 <211> 51 <212> PRT <213> Homo sapiens

50

<210> 1057 <211> 260 <212> PRT <213> Homo sapiens <400> 1057 Glu Ala Pro Ala Gln

Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro 10 Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser 25 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser 40 Val Gly Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro 55 Arg Pro Leu Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala 70 75 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser 85 90 Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Arg Asp 100 105 Asn Trp Pro Pro Gly Ala Thr Phe Gly Gly Gly Thr Lys Val Glu Ile 120 125 Lys His Thr Thr Gly Glu Ile Val Leu Thr Gln Ala Pro Gly Thr Leu 135 Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln 150 155 Thr Ile Gly Ser Thr Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys 165 170 175 Ala Pro Lys Leu Leu Ile Tyr Trp Phe Ile Gln Phe Ala Lys Arg Gly 185 Pro Ile Lys Val Gln Cys His Arg Val Arg Gly Gln Thr Ser Leu Ser 195 200 205 Pro Ser Ala Asp Trp Ser Leu Lys Ile Leu Gln Cys Ile Ser Val Thr 210 215 220 Asn Met Gly Ala His Pro Thr Leu Leu Ala Glu Gly Pro Arg Trp Arg 230 235 Ser Asn Glu Leu Trp Leu His His Leu Ser Ser Ser Arg His Leu

Met Ser Ser \* 259

<210> 1058 <211> 52 <212> PRT <213> Homo sapiens

Trp Arg Pro Cys Leu Pro Arg Leu Arg Met Arg Val Leu Val Leu Leu 35 40 45

Ile Trp Ser \* 50 51

<210> 1059 <211> 97 <212> PRT <213> Homo sapiens

<210> 1060 <211> 99 <212> PRT <213> Homo sapiens

<400> 1060 Asn Lvs His Phe

<210> 1061 <211> 64 <212> PRT <213> Homo sapiens

<210> 1062 <211> 149 <212> PRT <213> Homo sapiens

<400> 1062 Met Tyr Leu Ser Asn Thr Thr Val Thr Ile Leu Ala Asn Leu Val Pro 5 10 Phe Thr Leu Thr Leu Ile Ser Phe Leu Leu Leu Ile Cys Ser Leu Cys 20 25 Lys His Leu Lys Lys Met Gln Leu His Gly Lys Gly Ser Gln Asp Pro 40 Ser Met Lys Val His Ile Lys Ala Leu Gln Thr Val Thr Ser Phe Leu 55 60 Leu Leu Cys Ala Ile Tyr Phe Leu Ser Met Ile Ile Ser Val Cys Asn 70 75 Phe Gly Arg Leu Glu Lys Gln Pro Val Phe Met Phe Cys Gln Ala Ile 85 90 Ile Phe Ser Tyr Pro Ser Thr His Pro Phe Ile Leu Ile Leu Gly Asn 100 105 Lys Lys Leu Lys Gln Ile Phe Leu Ser Val Leu Arg His Val Arg Tyr 115 120 125 Trp Val Lys Asp Arg Ser Leu Arg Leu His Arg Phe Thr Arg Gly Ala 135 Leu Cys Val Phe \* 145 148

<210> 1063 <211> 63 <212> PRT <213> Homo sapiens

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<210> 1064
<211> 92
<212> PRT
<213> Homo sapiens
```

<400> 1064 Met Met Leu Met Ser Leu Gly Gly Leu Leu Gly Pro Pro Leu Ser Gly 1 5 10 Phe Leu Arg Asp Glu Thr Gly Asp Phe Thr Ala Ser Phe Leu Leu Ser · 20 25 Gly Ser Leu Ile Leu Ser Gly Ser Phe Ile Tyr Ile Gly Leu Pro Arg 40 45 Ala Leu Pro Ser Cys Gly Pro Ala Ser Pro Pro Ala Thr Pro Pro Pro 60 Glu Thr Gly Glu Leu Leu Pro Ala Pro Gln Ala Val Leu Leu Ser Pro 70 Gly Gly Pro Gly Ser Thr Leu Asp Thr Thr Cys \* 85

<210> 1065
 <211> 67
 <212> PRT
 <213> Homo sapiens

<210> 1066 <211> 78 <212> PRT <213> Homo sapiens

50 55 60 Leu Ala Gly Trp Asp Leu Thr Gly Ala Pro Gly Ser Leu Gly 65 70 75 78

<210> 1067

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1067

50 54

<210> 1068

<211> 48

<212> PRT

<213> Homo sapiens

<400> 1068

Met His Val Cys Met Pro Leu Cys Leu Phe Leu Leu Ser Phe Ser Val

1 5 - 10 - 15

Ser Pro Asp Pro Arg Leu Leu Arg Met Glu Arg Leu Phe Arg Gly Cys

20 - 25 - 30

Ala Gln Asp Cys Pro Phe Leu Ala Leu His Gln Gly Glu Leu Trp \*

35 - 47

<210> 1069

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1069

 Met
 Ser
 Asn
 Leu
 Gln
 Phe
 Ile
 Phe
 Lys
 Asp
 Phe
 Gly
 Ile
 Leu
 Ile
 Lys

 Phe
 Trp
 Tyr
 Leu
 His
 Ile
 Lys
 Phe
 Gly
 Phe
 Tyr
 Ile
 Thr
 Ser
 Cys
 Leu

 Leu
 Cys
 Phe
 Pro
 Pro
 Ser
 Phe
 Met
 Leu
 Phe
 Phe
 Trp
 Pro
 His

 Asp
 Tyr
 Asn
 Leu
 Arg
 Phe
 Cys
 Ile
 His
 Ile
 Thr
 Phe
 Cys
 His
 Phe
 \*

 50
 Frag
 Frag<

<210> 1070

<211> 73 <212> PRT <213> Homo sapiens

<210> 1071 <211> 152 <212> PRT <213> Homo sapiens

<400> 1071 Met Phe Trp Thr Met Ile Ile Leu Leu Gln Val Leu Ile Pro Ile Ser Leu Tyr Val Ser Ile Glu Ile Val Lys Leu Gly Gln Ile Tyr Phe Ile 20 25 Gln Ser Asp Val Asp Phe Tyr Asn Glu Lys Met Asp Ser Ile Val Gln 40 Cys Arg Ala Leu Asn Ile Ala Glu Asp Leu Gly Gln Ile Gln Tyr Leu 55 Phe Ser Asp Lys Thr Gly Thr Leu Thr Glu Asn Lys Met Val Phe Arg 70 Arg Trp Ser Gly Gly Arg Phe Asp Tyr Cys Pro Gly Glu Lys Ala Arg 85 90 Arg Val Glu Ser Phe Gln Glu Ala Ala Phe Glu Glu His Phe Leu 105 Thr Thr Gly Arg Gly Phe Leu Thr His Met Ala Asn Pro Arg Ala Pro 120 125 Pro Leu Ala Asp Thr Phe Lys Met Gly Ala Ser Gly Arg Leu Ser Pro 135 Pro Ser Leu Thr Ala Arg Gly Ala 150 152

<210> 1072 <211> 113 <212> PRT <213> Homo sapiens

 $<\!\!400\!\!> 1072$  Met Thr Ala Gly Val Leu Trp Gly Leu Phe Gly Val Leu Gly Phe Thr 1 5 . 10 . 15 Gly Val Ala Leu Leu Leu Tyr Ala Leu Phe His Lys Ile Ser Gly Glu

<210> 1073

<211> 52

<212> PRT

<213> Homo sapiens

<400> 1073

<210> 1074

<211> 78

<212> PRT

<213> Homo sapiens .

<400> 1074

Met Phe Ser Arg Leu Tyr Ala Val Cys Met Leu Tyr Met Trp Gly Phe 1 5 10 15

Val Asp Lys Met Cys Val Trp Ser Val Met Gln Val Cys Tyr Cys Leu 20 25 30

Val Phe Val Tyr Val Phe Leu Cys Met Val Cys Arg Val Arg Ala His 35 40 45

Asp His Ile Gln Ile Leu Asp Pro Tyr Ser Arg Leu Val Leu Ser Arg 50 55 60

Leu Pro Arg Leu Glu Thr Gly Lys Asp Ser Ser Ser Leu \*

<210> 1075

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1075 Met Ser Ser Pro Gly Leu Leu Phe Ser Ser Leu Ser His Leu Leu 1 5 10 Leu Asn Ser Ser Thr Leu Ala Leu Leu Thr His Arg Leu Ser Gln Met 20 25 Thr Cys Leu Gln Ser Leu Arg Leu Asn Arg Asn Ser Ile Gly Asp Val 40 Gly Cys Cys His Leu Ser Glu Ala Leu Arg Ala Ala Thr Ser Leu Glu Glu Leu Asp Leu Ser His Asn Gln Ile Gly Asp Ala Gly Asp Gln His 70 Leu Ala Thr Ile Leu Pro Gly Leu Pro Glu Leu Arg Lys Ile Asp Leu 85 90 Ser Gly Asn Ser Ile Ser Ser Ala Gly Gly Val Gln Leu Ala Glu Ser 100 105 Leu Val Leu Cys Arg Arg Leu Glu Glu Leu Met Leu Gly Cys Asn Ala 120 125 Leu Gly Asp Pro Thr Ala Leu Gly Leu Ala Gln Glu Leu Pro Gln His 135 140 Leu Arg Val Leu His Leu Pro Phe Ser His Leu Gly Pro Asp Gly Ala 150 · 155 Leu Ser Leu Ala Gln Asp Leu Asp Gly Ser Pro His Leu Glu Glu Ile 165 170 Ser Leu Ala Glu Asn Asn Leu Ala Gly Gly Val Leu Arg Phe Cys Met 185 Glu Leu Pro Leu Leu Arg Gln Ile Glu Leu Ser Trp Asn Leu Leu Gly 195 200 Asp Glu Ala Ala Ala Glu Leu Ala Gln Val Leu Pro Gln Met Gly Arg 215 220 Leu Lys Arg Val Glu Tyr Glu Gly Pro Gly Glu Glu Trp Asp Gly Leu 230 235 Lys Gly Asp Leu His Pro Gly Asn Thr Lys Arg Pro Leu 250

<210> 1076 <211> 64 <212> PRT <213> Homo sapiens

<210> 1077 <211> 147 <212> PRT <213> Homo sapiens

<400> 1077 Met Met Lys Ser Leu Arg Val Leu Leu Val Ile Leu Trp Leu Gln Leu 5 10 Ser Trp Val Trp Ser Gln Gln Lys Glu Val Glu Gln Asn Ser Gly Pro 20 25 Leu Ser Val Pro Glu Gly Ala Ile Ala Ser Leu Asn Cys Thr Tyr Ser 40 Asp Arg Gly Ser Gln Ser Phe Phe Trp Tyr Arg Gln Tyr Ser Gly Lys 55 60 Ser Pro Glu Leu Ile Met Ser Ile Tyr Ser Asn Gly Asp Lys Glu Asp 70 75 Gly Arg Phe Thr Ala Gln Leu Asn Lys Ala Ser Gln Tyr Val Ser Leu 85 90 Leu Ile Arg Asp Ser Gln Pro Ser Asp Ser Ala Thr Tyr Leu Cys Ala 100 105 Asp Tyr Ser Gly Asn Thr Pro Leu Val Phe Gly Lys Gly Thr Arg Leu 120 125 Ser Val Ile Ala Asn Ile Gln Asn Pro Asp Pro Ala Leu Tyr Gln Leu 135 Arg Asp Ser 145 147

<210> 1078

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1078

<210> 1079

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1079

Leu Met Lys Asp Pro Arg Phe Trp Ile Ala Ile Ala Ala Tyr Leu Ala 65 70 75 80

Cys Val Leu Phe Ala Val Phe Phe Asn Ile Phe Leu Ser Pro Ala Asn 85 90 95 96

<210> 1080 <211> 134 <212> PRT <213> Homo sapiens

. <400> 1080 Met Leu Ser Ile Leu Leu Ala Thr Leu Thr Leu Ser Leu Lys Glu Lys 10 Arg Gly Glu Arg Ser Ile His Gln Pro Glu Pro Ser Glu Lys Ser Val 25 Cys Leu Pro Val Ser Gly Ala Asp Pro Phe Arg Gly Ser Arg Gly Arg 40 Gly Lys Glu Ile Arg Arg Glu Lys Asp Ile Gly Leu Leu Glu His Val 55 Gly Gln Glu Val Pro Arg Arg Ile Cys Glu Gln Leu Pro Asp Ser Lys 70 75 Ala Leu Ala Arg Pro Gln Asp Gly Pro Cys Leu Leu Asp Ile Arg Lys 85 90 Pro Lys Gly Gln Asn Lys Asn Thr Cys Leu Val Gly Glu Gly Ser Leu 105 Arg Gly His Gln Val Gly Gln Ile Pro Leu Val Thr His Leu Trp Arg 115 120 Leu Pro Gln Lys Cys 130 133

<210> 1081 <211> 185 <212> PRT <213> Homo sapiens

<400> 1081 Met Lys Ile Leu Val Ala Phe Leu Val Val Leu Thr Ile Phe Gly Ile 10 15 Gln Ser His Gly Tyr Glu Val Phe Asn Ile Ile Ser Pro Ser Asn Asn 25 Gly Gly Asn Val Gln Glu Thr Val Thr Ile Asp Asn Glu Lys Asn Thr 45 Ala Ile Ile Asn Ile His Ala Gly Ser Cys Ser Ser Thr Thr Ile Phe Asp Tyr Lys His Gly Tyr Ile Ala Ser Arg Val Leu Ser Arg Ala 70 75 Cys Phe Ile Leu Lys Met Asp His Gln Asn Ile Pro Pro Leu Asn Asn 90 95 85 Leu Gln Trp Tyr Ile Tyr Glu Lys Gln Ala Leu Asp Asn Met Phe Ser 105 Ser Lys Tyr Thr Trp Val Lys Tyr Asn Pro Leu Glu Ser Leu Ile Lys

<210> 1082 <211> 285 <212> PRT <213> Homo sapiens <221> misc\_feature <222> (1)...(285)

<223> Xaa = any amino acid or nothing

<400> 1082 Met Val Ile Ala Leu Ile Ile Phe Leu Arg Ser Pro Ala Met Ala Gly 10 Gly Leu Phe Ala Ile Glu Arg Glu Phe Phe Phe Glu Leu Gly Leu Tyr 25 Asp Pro Gly Leu Gln Ile Trp Gly Gly Glu Asn Phe Glu Ile Ser Tyr 40 Lys Ile Trp Gln Cys Gly Gly Lys Leu Leu Phe Xaa Pro Cys Ser Arg Val Gly His Ile Tyr Arg Leu Glu Gly Trp Gln Gly Asn Pro Pro 70 75 Ile Tyr Val Gly Ser Ser Pro Thr Leu Lys Asn Tyr Val Arg Val Val 85 90 Glu Val Trp Trp Asp Glu Tyr Lys Asp Tyr Phe Tyr Ala Ser Arg Pro 100 105 Glu Ser Gln Ala Leu Pro Tyr Gly Asp Ile Ser Glu Leu Lys Lys Phe 120 Arg Glu Asp His Asn Cys Lys Ser Phe Lys Trp Phe Met Glu Glu Ile 135 Ala Tyr Asp Ile Thr Ser His Tyr Pro Leu Pro Pro Lys Asn Val Asp 150 155 Trp Gly Glu Ile Arg Gly Phe Glu Thr Ala Tyr Cys Ile Asp Ser Met 165 170 Gly Lys Thr Asn Gly Gly Phe Val Glu Leu Gly Pro Cys His Arg Met 185 Gly Gly Asn Gln Leu Phe Arg Ile Asn Glu Ala Asn Gln Leu Met Gln 200 205 Tyr Asp Gln Cys Leu Thr Lys Gly Ala Asp Gly Ser Lys Val Met Ile 215 220 Thr His Cys Asn Leu Asn Glu Phe Lys Glu Trp Gln Tyr Phe Lys Asn 230 Leu His Arg Phe Thr His Ile Pro Ser Gly Lys Cys Leu Asp Arg Ser 245 250 Glu Val Leu His Gln Val Phe Ile Ser Asn Cys Asp Ser Ser Lys Thr 260 . 265 Thr Gln Lys Trp Glu Met Asn Asn Ile His Ser Val \* 275 280

<210> 1083 <211> 73 <212> PRT <213> Homo sapiens

<400> 1083

 Met
 Phe
 Trp
 Phe
 Leu
 Asn
 Ile
 Phe
 Leu
 Ile
 Ile
 Ile
 Leu
 Leu
 Ile
 Leu
 Ile
 Ile</th

<210> 1084 <211> 56 <212> PRT

<213> Homo sapiens

<210> 1085 <211> 68 <212> PRT <213> Homo sapiens

<400> 1085

 Met Gln Ile
 Phe Leu Leu Leu Leu Tyr Ala Leu Gly Arg Phe Val Leu Leu 1
 5
 10
 15

 Val Thr Phe Ser Pro Leu Val Leu Ser Leu Ser Tyr Pro Val Leu Val 20
 25
 30

 Ser Phe Tyr Leu Arg Tyr Pro Ser Val Leu Phe Val Phe Leu His Asn 35
 40
 45

 Val Val Ser Leu Val Phe Gly Tyr Pro Leu Gln Asn Gln Gln Gly Leu 50
 55
 60

 Ile His Pro \*
 65
 67

<210> 1086 <211> 62 <212> PRT <213> Homo sapiens

<210> 1087 <211> 294 <212> PRT <213> Homo sapiens

<400> 1087 Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro Leu 10 Leu Val Ala Glu Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe Ala 25 Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu Leu 40 Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe Leu Gly Val Lys Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly Thr 70 Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val Arg 90 85 Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe Phe 105 Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg Cys 120 125 Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His Phe 135 Gln Glu Phe Asn Pro Ala Leu Ser Pro Gln Arg Ser Pro Pro Gly Pro 150 155 Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser 170 Arg Gly Ala Pro Ile Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu 185 Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala 200 Gly Glu Leu Ala Gly Gln Glu Glu Glu Glu Ala Leu Glu Gly Leu Glu 215 220 Val Met Asp Val Phe Leu Arg Phe Ser Gly Leu His Leu Phe Arg Ala 225 230 235 Val Glu Pro Gly Leu Val Gln Lys Phe Ser Leu Arg Asp Cys Ser Pro 245 250

Arg Leu Ser Glu Glu Leu Tyr His Arg Cys Arg Leu Ser Asn Leu Glu
260 265 270

Gly Leu Gly Gly Arg Ala Gln Leu Ala Met Ala Leu Phe Glu Gln Glu
275 280 285

Gln Ala Asn Ser Thr \*
290 293

<210> 1088 <211> 477 <212> PRT <213> Homo sapiens

<400> 1088 Met Gln Trp Lys Val Thr Leu Thr Ser Arg Trp Gly Leu Leu Arg His Cys Gln Val Leu Ala Gly Leu Leu His Leu Gly Asn Ile Gln Phe Ala 25 Ala Ser Glu Asp Glu Ala Gln Pro Cys Gln Pro Met Asp Asp Ala Lys Tyr Ser Val Arg Thr Ala Ala Ser Leu Leu Gly Leu Pro Glu Asp Val 55 Leu Leu Glu Met Val Gln Ile Lys Thr Ile Arg Ala Gly Arg Gln Gln 70 Gln Val Phe Arg Lys Pro Cys Ala Arg Ala Glu Cys Asp Thr Arg Arg 90 . 95 Asp Cys Leu Ala Lys Leu Ile Tyr Ala Arg Leu Phe Asp Trp Leu Val 105 Ser Val Ile Asn Ser Ser Ile Cys Ala Asp Thr Asp Ser Trp Thr Thr 120 125 Phe Ile Gly Leu Leu Asp Val Tyr Gly Phe Glu Ser Phe Pro Asp Asn 135 Ser Leu Glu Gln Leu Cys Ile Asn Tyr Ala Asn Glu Lys Leu Gln Gln 150 155 His Phe Val Ala His Tyr Leu Arg Ala Gln Gln Glu Glu Tyr Ala Val 170 Glu Gly Leu Glu Trp Ser Phe Ile Asn Tyr Gln Asp Asn Gln Pro Cys 185 Leu Asp Leu Ile Glu Gly Ser Pro Ile Ser Ile Cys Ser Leu Ile Asn 200 Glu Glu Cys Arg Leu Asn Arg Pro Ser Ser Ala Ala Gln Leu Gln Thr 215 220 Arg Ile Glu Thr Ala Leu Ala Gly Ser Pro Cys Leu Gly His Asn Lys 230 235 Leu Ser Arg Glu Pro Ser Phe Ile Val Val His Tyr Ala Gly Pro Val 245 250 Arg Tyr His Thr Ala Gly Leu Val Glu Lys Asn Lys Asp Pro Ile Pro 265 Pro Glu Leu Thr Arg Leu Leu Gln Gln Ser Gln Asp Pro Leu Leu Met 280 Gly Leu Phe Pro Thr Asn Pro Lys Glu Lys Thr Gln Glu Glu Pro Pro 295 300 Gly Gln Ser Arg Ala Pro Val Leu Thr Val Val Ser Lys Phe Lys Ala 310 315 Ser Leu Glu Gln Leu Leu Gln Val Leu His Ser Thr Thr Pro His Tyr 330 Ile Arg Cys Ile Met Pro Asn Ser Gln Gly Gln Ala Gln Thr Phe Leu

340 345 Gln Glu Glu Val Leu Ser Gln Leu Glu Ala Cys Gly Leu Val Glu Thr 360 365 Ile His Ile Ser Ala Ala Gly Phe Pro Ile Arg Val Ser His Arg Asn 375 380 Phe Val Glu Arg Tyr Lys Leu Leu Arg Arg Leu His Pro Cys Thr Ser 390 395 Ser Gly Pro Asp Ser Pro Tyr Pro Ala Lys Gly Leu Pro Glu Trp Cys 405 410 Pro His Ser Glu Glu Ala Thr Leu Glu Pro Leu Ile Gln Asp Ile Leu 420 425 His Thr Leu Pro Val Leu Thr Gln Ala Ala Ile Thr Gly Asp Ser 435 440 Ala Glu Ala Met Pro Ala Pro Met His Cys Gly Arg Thr Lys Val Phe 450 455 460 Met Thr Asp Ser Met Leu Glu Leu Leu Glu Cys Gly Ala 470 475 477

<210> 1089 <211> 66 <212> PRT

<213> Homo sapiens

<400> 1089

 Met Ala Ala Gly Val Ser Ser Val Leu Leu Leu Leu Phe Thr Leu Met

 1
 5
 10
 15

 Glu Ser Gly Leu Lys His Arg Val Trp Glu Ser Trp Gln Leu Phe Thr
 20
 25
 30

 Ser Trp Leu Ala Phe Cys Ser Pro Ser Phe Ser Val Val Phe Thr Cys
 45

 Ser Tyr Ser Leu Ser Ser Trp Gly Leu Lys Gly Ile Ser Ser Arg Thr
 50
 55
 60

 Arg \*
 65

<210> 1090 <211> 185 <212> PRT <213> Homo sapiens

<400> 1090 Met Leu Trp Leu Leu Phe Phe Leu Val Thr Ala Ile His Ala Glu Leu 1 5 10 Cys Gln Pro Gly Ala Glu Asn Ala Phe Lys Val Arg Leu Ser Ile Arg 20 25 Thr Ala Leu Gly Asp Lys Ala Tyr Ala Trp Asp Thr Asn Glu Glu Tyr 40 Leu Phe Lys Ala Met Val Ala Phe Ser Met Arg Lys Val Pro Asn Arg . 60 55 Glu Ala Thr Glu Ile Ser His Val Leu Leu Cys Asn Val Thr Gln Arg 70 75 Val Ser Phe Trp Phe Val Val Thr Asp Pro Ser Lys Asn His Thr Leu 85

<210> 1091 <211> 47 <212> PRT

<213> Homo sapiens

<210> 1092 <211> 46 <212> PRT <213> Homo sapiens

<210> 1093 <211> 64 <212> PRT <213> Homo sapiens

35 40 45
Ser Leu Pro Gly Ala Pro Ala Thr Ser Ala Ser Pro Ser Val Leu \*
50 55 60 63

<210> 1094 <211> 85 <212> PRT

<213> Homo sapiens

<400> 1094

 Met
 His
 Phe
 Leu
 Ala
 Thr
 Phe
 Ala
 Leu
 Phe
 Ala
 Leu
 Phe
 Ala
 Leu
 Phe
 Ala
 Leu
 Inches
 Phe
 Inches
 Phe
 Inches
 Inches

<210> 1095 <211> 89 <212> PRT <213> Homo sapiens

<210> 1096 <211> 158 <212> PRT <213> Homo sapiens

Lys Phe Leu Lys Lys Ala Asp Thr Arg Asp Ser Arg Gln Ala Cys Leu 20 25 Ala Ala Ser Leu Ala Leu Ala Leu Asn Gly Val Phe Thr Asn Thr Ile 40 Lys Leu Ile Val Gly Arg Pro Arg Pro Asp Phe Phe Tyr Arg Cys Phe 55 Pro Asp Gly Leu Ala His Ser Asp Leu Met Cys Thr Gly Asp Lys Asp 70 75 Val Val Asn Glu Gly Arg Lys Ser Phe Pro Ser Gly His Ser Ser Phe 85 90 Ala Phe Ala Gly Leu Ala Phe Ala Ser Phe Tyr Leu Ala Gly Lys Leu 105 110 His Cys Phe Thr Pro Gln Gly Arg Gly Lys Ser Trp Arg Phe Cys Ala 120 125 Phe Leu Ser Pro Leu Leu Phe Ala Ala Val Ile Ala Leu Ser Arg Thr 135 140 Cys Asp Tyr Lys His His Trp Gln Gly Pro Phe Lys Trp 150

<210> 1097 <211> 88 <212> PRT <213> Homo sapiens

Glu Pro Gln Leu Gly Gly Gly \* 85 87

<210> 1098 <211> 58 <212> PRT <213> Homo sapiens

\* 136 ·

<210> 1099 <211> 72 <212> PRT <213> Homo sapiens

<400> 1099

<210> 1100 <211> 47 <212> PRT <213> Homo sapiens

<400> 1100

Met Ser Phe Phe Leu Ile Leu Gly Val Gly Ser Cys Leu Ser Tyr Ser 1 5 15

Leu Val Pro Leu Ile Ile Leu Ser Phe Cys His Phe Tyr Pro Glu Ser 20 25 30

Val Gly Cys Pro Asp Ala Pro Ser Pro Arg Val Arg Gly Arg Val 35 40 45

<210> 1101 <211> 130 <212> PRT <213> Homo sapiens

<400> 1101

Met Arg Pro Leu Lys Pro Gly Ala Pro Leu Pro Ala Leu Phe Leu Leu 5 10 Ala Leu Ala Leu Ser Pro His Gly Ala His Gly Arg Pro Arg Gly Arg Arg Gly Ala Arg Val Thr Asp Lys Glu Pro Lys Pro Leu Leu Phe Leu 35 40 Pro Ala Ala Gly Ala Gly Arg Thr Pro Ser Gly Ser Arg Ser Ala Glu 55 60 Ile Phe Pro Arg Asp Ser Asn Leu Lys Asp Lys Phe Ile Lys His Phe 70 75 Thr Gly Pro Val Thr Phe Ser Pro Glu Cys Ser Lys His Phe His Arg 90 Leu Tyr Tyr Asn Thr Arg Glu Cys Ser Thr Pro Ala Tyr Tyr Lys Arg 105

Cys Ala Arg Leu Leu Thr Arg Leu Ala Val Ser Pro Leu Cys Ser Gln
115
120
125
Thr \*

<210> 1102 <211> 170 <212> PRT <213> Homo sapiens

<213> Homo sapiens

<400> 1102 Met Gln Phe Val Leu Leu Arg Thr Leu Ala Tyr Ile Pro Thr Pro Ile 5 10 Tyr Phe Gly Ala Val Ile Asp Thr Thr Cys Met Leu Trp Gln Glu 20 25 Cys Gly Val Gln Gly Ser Cys Trp Glu Tyr Asn Val Thr Ser Phe Arq 40 Phe Val Tyr Phe Gly Leu Ala Ala Val Leu Lys Tyr Val Gly Cys Ile 55 Phe Ile Leu Leu Ala Trp Tyr Ser Ile Lys Asp Thr Glu Asp Glu Gln Pro Arg Leu Arg Gln Lys Lys Ile Cys Leu Ser Thr Leu Ser Asp Thr 85 Met Thr Gln Pro Asp Ser Ala Gly Val Val Ser Cys Pro Leu Phe Thr 100 105 Pro Asp Gly Glu Ile His Lys Lys Thr Gly Leu Arg Lys Arg Asp Pro 120 Gly Gly Thr Thr Glu Pro Thr Pro Gly Pro Leu Arg Lys Arg Pro Leu 135 140 Cys Thr Leu Glu Ala Pro Arg Leu Pro Asn Lys Ala Pro Phe Thr Leu 150 Glu Leu Ala Leu Leu Arg Val Arg Leu \* 165

<210> 1103 <211> 62 <212> PRT <213> Homo sapiens

<210> 1104 <211> 83

<212> PRT <213> Homo sapiens

<210> 1105 <211> 124 <212> PRT <213> Homo sapiens

82

<400> 1105 Met Val Phe Thr Val Thr Leu Lys Leu Ala Leu Asp Thr His Tyr Trp 10 Thr Trp Ile Asn His Phe Val Ile Trp Gly Ser Leu Leu Phe Tyr Val 20 Val Phe Ser Leu Leu Trp Gly Gly Val Ile Trp Pro Phe Leu Asn Tyr 40 Gln Arg Met Tyr Tyr Val Phe Ile Gln Met Leu Ser Ser Gly Pro Ala Trp Leu Ala Ile Val Leu Leu Val Thr Ile Ser Leu Leu Pro Asp Val 65 70 75 80 Leu Lys Lys Val Leu Cys Arg Gln Leu Trp Pro Thr Ala Thr Glu Arg 90 Val Gln Thr Lys Ser Gln Cys Leu Ser Val Glu Gln Ser Thr Ile Phe 100 105 Met Leu Ser Gln Thr Ser Ser Ser Leu Ser Phe \* 120

<210> 1106 <211> 248 <212> PRT <213> Homo sapiens

Leu Glu Ser Ser Trp Pro Phe Trp Leu Thr Leu Ala Leu Ala Val Ile 55 Leu Gln Asn Met Ala Ala His Trp Val Phe Leu Glu Thr His Asp Gly 70 His Pro Gln Leu Thr Asn Arg Arg Val Leu Tyr Ala Ala Thr Phe Leu 85 90 Leu Phe Pro Leu Asn Val Leu Val Gly Ala Met Val Ala Thr Trp Arg 105 110 Val Leu Leu Ser Ala Leu Tyr Asn Ala Ile His Leu Gly Gln Met Asp 120 125 Leu Ser Leu Leu Pro Pro Arg Ala Ala Thr Leu Asp Pro Gly Tyr Tyr 135 140 Thr Tyr Arg Asn Phe Leu Lys Ile Glu Val Ser Gln Ser His Pro Ala 155 160 Met Thr Ala Phe Cys Ser Leu Leu Leu Gln Ala Gln Ser Leu Leu Pro 170 Arg Thr Met Ala Ala Pro Gln Asp Ser Leu Arg Pro Gly Glu Glu Asp 180 185 Glu Gly Met Gln Leu Leu Gln Thr Lys Asp Ser Met Ala Lys Gly Ala 195 200 Arg Pro Gly Ala Ser Arg Gly Arg Ala Arg Trp Gly Leu Ala Tyr Thr 215 220 Leu Leu His Asn Pro Thr Leu Gln Val Phe Arg Lys Thr Ala Leu Leu 230 235 Gly Ala Asn Gly Ala Gln Pro \* 245 247

<210> 1107 <211> 121 <212> PRT

<213> Homo sapiens

<400> 1107 Met Met Leu Ala Phe Thr Met Trp Asn Pro Trp Ile Ala Met Cys Leu 5 10 Leu Gly Leu Ser Tyr Ser Leu Leu Ala Cys Ala Leu Trp Pro Met Val 25 Ala Phe Val Val Pro Glu His Gln Leu Gly Thr Ala Tyr Gly Phe Met 40 Gln Ser Ile Gln Asn Leu Gly Leu Ala Ile Ile Ser Ile Ile Ala Gly 50 55 60 Met Ile Leu Asp Ser Arg Gly Tyr Leu Phe Leu Glu Val Phe Phe Ile 70 Ala Cys Val Ser Leu Ser Leu Ser Val Val Leu Leu Tyr Leu Val 90 Asn Arg Ala Gln Gly Gly Asn Leu Asn Tyr Ser Ala Arg Gln Arg Glu 105 Glu Ile Lys Phe Ser His Thr Glu \* 120

<210> 1108 <211> 53 <212> PRT <213> Homo sapiens

<210> 1109 <211> 259 <212> PRT <213> Homo sapiens

<400> 1109 Met His Val Val Ile Val Leu Lys Ala Leu Val Ala Val Gln Ile Leu Leu Ser Ile Lys Glu Tyr Thr Leu Glu Arg Asn His Met His Val Ile Ser Val Ile Lys Val Leu Val Lys Ala Gln Thr Ser Leu Asn Ile Arg 40 Glu Tyr Thr Leu Val Lys Ser Leu Ile Ile Ala Ile Val Val Arg Lys 55 Pro Ser Val Arg Val Leu Thr Leu Phe Phe Ile Arg Glu Phe Thr Leu 75 Glu Lys Asn Tyr Tyr Leu Cys Thr Gln Cys Ser Lys Ser Phe Ser Gln 85 90 Ile Ser Asp Leu Ile Lys His Gln Arg Ile His Thr Gly Glu Lys Pro 100 105 110 Tyr Lys Cys Ser Glu Cys Arg Lys Ala Phe Ser Gln Cys Ser Ala Leu 115 120 125 Thr Leu His Gln Arg Ile His Thr Gly Lys Lys Pro Asn Pro Cys Asp 135 140 Glu Cys Gly Lys Ser Phe Ser Arg Arg Ser Asp Leu Ile Asn His Gln 150 155 Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asp Ala Cys Gly Lys 170 Ala Phe Ser Thr Cys Thr Asp Leu Ile Glu His Gln Lys Thr His Ala 185 190 Glu Glu Lys Pro Tyr Gln Cys Val Gln Cys Ser Arg Ser Cys Ser Gln 200 Leu Ser Glu Leu Thr Ile His Glu Glu Val His Cys Gly Glu Asp Ser 215 220 Gln Asn Val Met Asn Val Arg Lys Pro Leu Val Cys Thr Pro Thr Leu 225 230 235 Phe Ser Thr Arg Asp Thr Val Pro Glu Lys Asn Leu Met Asn Ala Val 250 Asp Tyr \*

<210> 1110

<211> 47 <212> PRT <213> Homo sapiens

<400> 1110

<210> 1111 <211> 93 <212> PRT <213> Homo sapiens

<400> 1111

 Met
 Ser
 Leu
 Arg
 Ala
 Pro
 Ser
 Val
 Arg
 Ile
 Phe
 Val
 Tyr
 Leu
 Leu
 Phe

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<210> 1112 <211> 71 <212> PRT <213> Homo sapiens

<400> 1112

<210> 1113 <211> 47

<212> PRT <213> Homo sapiens

<400> 1113

<210> 1114 <211> 55 <212> PRT <213> Homo sapiens

<400> 1114

<210> 1115 <211> 83 <212> PRT <213> Homo sapiens

<400> 1115

<210> 1116 <211> 145 <212> PRT <213> Homo sapiens

<400> 1116 Met Val Leu Val Val Gly Asn Leu Val Asn Trp Ser Phe Ala Leu 1 5 10 Phe Gly Leu Ile Tyr Arg Pro Arg Asp Phe Ala Ser Tyr Met Leu Gly 25 Ile Phe Ile Cys Asn Leu Leu Leu Tyr Leu Ala Phe Tyr Ile Ile Met 35 40 Lys Leu Arg Ser Ser Glu Lys Val Leu Pro Val Pro Leu Phe Cys Ile 55 60 Val Ala Thr Ala Val Met Trp Ala Ala Ala Leu Tyr Phe Phe Gln 70 75 Asn Leu Ser Ser Trp Glu Gly Thr Pro Ala Glu Ser Arg Glu Lys Asn 90 Arg Glu Cys Ile Leu Leu Asp Phe Phe Asp Asp His Asp Ile Trp His 105 Phe Leu Ser Ala Thr Ala Leu Phe Phe Ser Phe Leu Asp Leu Leu Thr 120 125 Leu Asp Asp Asp Leu Asp Val Val Arg Arg Asp Gln Ile Pro Val Phe 130 135

<210> 1117 <211> 139 <212> PRT <213> Homo sapiens

<400> 1117 Met Gly Asp Phe Ala Gly Val Asp Phe Val Phe Leu Val Val Cys Phe 10ء Ala Gln Arg Gln Gly Ala Ala Glu Ala Val Gly Ala Val Leu Ala Val Leu Leu Cys Asp Thr Leu Leu Gly Val Thr Arg Leu Glu Gly Val Ile 40 His Leu Pro Leu Tyr Phe Gly Leu Ser Gly Ile Glu Val Ile Gln Gln 55 60 Ala His Asn Arg Gly Ser Ser Arg Phe Gln Leu Leu Ile Arg Trp Arg 70 75 Glu Asp Glu Asp Arg Trp Cys Ser His Ser Ser Phe Asp Val His Leu 90 Gly Pro Leu Ala Glu Arg Pro His Val Ser Thr Gln Leu Leu Thr Val 105 110 Ile Ser Cys Lys Ile Phe Arg Leu Gln Ala Thr Asp Cys Glu Ser Lys 115 120 Phe Cys Pro Arg Ser Ser Ala Ala Glu Pro \* 130 135 138

<210> 1118 <211> 194 <212> PRT <213> Homo sapiens

<400> 1118 Met Cys Leu Leu Phe Leu Leu Pro Arg Phe Pro Val Ser Trp Arg Ala 5 10 Gly Val Asp Gly Ala Ala Pro Ser Ser Gln Asp Leu Trp Arg Ile Arg 25 Ser Pro Cys Gly Asp Cys Glu Gly Phe Asp Val His Ile Met Asp Asp Met Ile Lys Arg Ala Leu Asp Phe Arg Glu Ser Arg Glu Ala Glu Pro His Pro Leu Trp Glu Tyr Pro Cys Arg Ser Leu Ser Glu Pro Trp Gln 70 Ile Leu Thr Phe Asp Phe Gln Gln Pro Val Pro Leu Gln Pro Leu Cys 85 90 Ala Glu Gly Thr Val Glu Leu Lys Arg Pro Gly Gln Ser His Ala Ala 100 105 Val Leu Trp Met Glu Tyr His Leu Thr Pro Glu Cys Thr Leu Ser Thr 120 125 Gly Leu Leu Glu Pro Ala Asp Pro Glu Gly Gly Cys Cys Trp Asn Pro 135 140 His Cys Lys Gln Ala Val Tyr Phe Phe Ser Pro Ala Pro Asp Pro Arg 150 155 Ala Leu Leu Gly Gly Pro Arg Thr Val Ser Tyr Ala Val Glu Phe His 170 Pro Asp Thr Gly Asp Ile Ile Met Glu Phe Arg His Ala Asp Thr Pro 180 185 190 Asp \* 193

<210> 1119 <211> 118 <212> PRT <213> Homo sapiens

<400> 1119 Met Leu Val Leu Leu Pro Arg Ser Lys Ala Met Pro Leu Leu Ser Val 10 1 5 Asn Val Thr Leu Ala Phe Phe Pro Arg Asn Lys Glu Ile Val Lys Tyr 25 Leu Leu Asn Gln Gly Ala Asp Val Thr Leu Arg Ala Lys Asn Gly Tyr 40 Thr Ala Phe Asp Leu Val Met Leu Leu Asn Asp Pro Asp Ile Phe Gly 55 Gly Glu Leu Ile Gly Phe Leu Ser Val Val Thr Glu Leu Val Arg Leu 70 75 Leu Ala Ser Val Phe Met Gln Val Asn Lys Asp Ile Gly Arg Arg Ser 90 His Gln Leu Pro Leu Pro His Ser Lys Val Pro Thr Ala Leu Glu His 105 Pro Ser Ala Ala Arg \* 115 117

<210> 1120 <211> 842 <212> PRT

## <213> Homo sapiens

<400> 1120 Met Leu Trp Gly Ser Gly Lys Cys Lys Ala Leu Thr Lys Phe Lys Phe Val Phe Phe Leu Arg Leu Ser Arg Ala Gln Gly Gly Leu Phe Glu Thr 25 Leu Cys Asp Gln Leu Leu Asp Ile Pro Gly Thr Ile Arg Lys Gln Thr Phe Met Ala Met Leu Leu Lys Leu Arg Gln Arg Val Leu Phe Leu Leu 55 Asp Gly Tyr Asn Glu Phe Lys Pro Gln Asn Cys Pro Glu Ile Glu Ala 70 75 Leu Ile Lys Glu Asn His Arg Phe Lys Asn Met Val Ile Val Thr Thr 85 90 Thr Thr Glu Cys Leu Arg His Ile Arg Gln Phe Gly Ala Leu Thr Ala 105 100 Glu Val Gly Asp Met Thr Glu Asp Ser Ala Gln Ala Leu Ile Arg Glu 115 120 125 Val Leu Ile Lys Glu Leu Ala Glu Gly Leu Leu Leu Gln Ile Gln Lys 135 140 Ser Arg Cys Leu Arg Asn Leu Met Lys Thr Pro Leu Phe Val Val Ile 150 155 Thr Cys Ala Ile Gln Met Gly Glu Ser Glu Phe His Ser His Thr Gln 165 170 Thr Thr Leu Phe His Thr Phe Tyr Asp Leu Leu Ile Gln Lys Asn Lys 180 185 His Lys His Lys Gly Val Ala Ala Ser Asp Phe Ile Arg Ser Leu Asp 200 His Cys Gly Tyr Leu Ala Leu Glu Gly Val Phe Ser His Lys Phe Asp 215 220 Phe Glu Leu Gln Asp Val Ser Ser Val Asn Glu Asp Val Leu Leu Thr 230 235 Thr Gly Leu Leu Cys Lys Tyr Thr Ala Gln Arg Phe Lys Pro Lys Tyr 245 250 Lys Phe Phe His Lys Ser Phe Gln Glu Tyr Thr Ala Gly Arg Arg Leu 265 Ser Ser Leu Leu Thr Ser His Glu Pro Glu Glu Val Thr Lys Gly Asn 280 Gly Tyr Leu Gln Lys Met Val Ser Ile Ser Asp Ile Thr Ser Thr Tyr 295 Ser Ser Leu Leu Arg Tyr Thr Cys Gly Ser Ser Val Glu Ala Thr Arg 310 315 Ala Val Met Lys His Leu Ala Ala Val Tyr Gln His Gly Cys Leu Leu 330 325 Gly Leu Ser Ile Ala Lys Arg Pro Leu Trp Arg Gln Glu Ser Leu Gln 345 Ser Val Lys Asn Thr Thr Glu Gln Glu Ile Leu Lys Ala Ile Asn Ile 360 Asn Ser Phe Val Glu Cys Gly Ile His Leu Tyr Gln Glu Ser Thr Ser 375 Lys Ser Ala Leu Ser Gln Glu Phe Glu Ala Phe Phe Gln Gly Lys Ser 390 395 Leu Tyr Ile Asn Ser Gly Asn Ile Pro Asp Tyr Leu Phe Asp Phe Phe 405 410 Glu His Leu Pro Asn Cys Ala Ser Ala Leu Asp Phe Ile Lys Leu Gly 425 Phe Tyr Gly Gly Ala Met Ala Ser Trp Glu Lys Ala Ala Glu Asp Thr

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440
                                           445
Gly Gly Ile His Met Glu Glu Ala Pro Glu Thr Tyr Ile Pro Ser Arg
           455
                                       460
Ala Val Ser Leu Phe Phe Asn Trp Lys Gln Glu Phe Arg Thr Leu Glu
                 470
                                   475
Val Thr Leu Arg Asp Phe Ser Lys Leu Asn Lys Gln Asp Ile Arg Tyr
                     490
              485
Leu Gly Lys Ile Phe Ser Ser Ala Thr Ser Leu Arg Leu Gln Ile Lys
          500 505
Arg Cys Ala Gly Val Ala Gly Ser Leu Ser Leu Val Leu Ser Thr Cys
                        520
Lys Asn Ile Tyr Ser Leu Met Val Glu Ala Ser Pro Leu Thr Ile Glu
                    535
                                       540
Asp Glu Arg His Ile Thr Ser Val Thr Asn Leu Lys Thr Leu Ser Ile
                 550
                                   555
His Asp Leu Gln Asn Gln Arg Leu Pro Gly Gly Leu Thr Asp Ser Leu
              565
                                570
Gly Asn Leu Lys Asn Leu Thr Lys Leu Ile Met Asp Asn Ile Lys Met
          580
                            585
Asn Glu Glu Asp Ala Ile Lys Leu Ala Glu Gly Leu Lys Asn Leu Lys
      595 . 600
Lys Met Cys Leu Phe His Leu Thr His Leu Ser Asp Ile Gly Glu Gly
                    615
                                      620
Met Asp Tyr Ile Val Lys Ser Leu Ser Ser Glu Pro Cys Asp Leu Glu
                630 635
Glu Ile Gln Leu Val Ser Cys Cys Leu Ser Ala Asn Ala Val Lys Ile
                               650
Leu Ala Gln Asn Leu His Asn Leu Val Lys Leu Ser Ile Leu Asp Leu
                            665
Ser Glu Asn Tyr Leu Glu Lys Asp Gly Asn Glu Ala Leu His Glu Leu
                        680
Ile Asp Arg Met Asn Val Leu Glu Gln Leu Thr Ala Leu Met Leu Pro
                  695
                                      700
Trp Gly Cys Asp Val Gln Gly Ser Leu Ser Ser Leu Leu Lys His Leu
                 710
                          715
Glu Glu Val Pro Gln Leu Val Lys Leu Gly Leu Lys Asn Trp Arg Leu
             725 730
Thr Asp Thr Glu Ile Arg Ile Leu Gly Ala Phe Phe Gly Lys Asn Pro
                    745
Leu Lys Asn Phe Gln Gln Leu Asn Leu Ala Gly Asn Arg Val Ser Ser
       755 760 765
Asp Gly Trp Leu Ala Phe Met Gly Val Phe Glu Asn Leu Lys Gln Leu
          775
                                      780
Val Phe Phe Asp Phe Ser Thr Lys Glu Phe Leu Pro Asp Pro Ala Leu
                  790
                                   795
Val Arg Lys Leu Ser Gln Val Leu Ser Lys Leu Thr Phe Leu Gln Glu
                                810
Ala Arg Leu Val Gly Trp Gln Phe Asp Asp Asp Leu Ser Val Ile
                            825
Thr Gly Ala Phe Lys Leu Val Thr Ala *
                         840 841
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<sup>&</sup>lt;210> 1121

<sup>&</sup>lt;211> 90

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<210> 1122 <211> 129 <212> PRT <213> Homo sapiens

<400> 1122 Met Phe Leu Leu Phe Trp Phe Ile Leu Ser Glu Gly Cys Pro Leu Leu Glu Gln Leu Asn Ile Ser Trp Cys Asp Gln Val Thr Lys Asp Gly Ile 20 Gln Ala Leu Val Arg Gly Cys Gly Gly Leu Lys Ala Leu Phe Leu Lys 40 Gly Cys Thr Gln Leu Glu Asp Glu Ala Leu Lys Tyr Ile Gly Ala His 55 Cys Pro Glu Leu Val Thr Leu Asn Leu Gln Thr Cys Leu Gln Ile Thr 70 Asp Glu Gly Leu Ile Thr Ile Cys Arg Gly Cys His Lys Leu Gln Ser 85 90 Leu Cys Ala Ser Gly Cys Ser Asn Ile Thr Asp Ala Ile Leu Asn Ala 100 105 Leu Ser Gln Asn Cys Pro Arg Leu Ile Ile Leu Glu Val Ala Arg Cys Ser 129

<210> 1123 <211> 243 <212> PRT <213> Homo sapiens

<400> 1123

55 Ala Arg Val Leu Val Asp Gly Glu Glu His Val Gly Phe Leu Lys Thr 70 75 Asp Gly Ser Phe Val Val His Asp Ile Pro Ser Gly Ser Tyr Val Val 85 90 Glu Val Val Ser Pro Ala Tyr Arg Phe Asp Pro Val Arg Val Asp Ile 105 100 Thr Ser Lys Gly Lys Met Arg Ala Arg Tyr Val Asn Tyr Ile Lys Thr 125 120 Ser Glu Val Val Arg Leu Pro Tyr Pro Leu Gln Met Lys Ser Ser Gly 135 140 Pro Pro Ser Tyr Phe Ile Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe 145 150 155 Leu Met Asn Pro Met Val Met Met Val Leu Pro Leu Leu Ile Phe 165 170 Val Leu Leu Pro Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg 180 185 190 Glu Met Glu Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro 195 200 205 Asp Val Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly 210 215 220 Lys Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys 230 235 Arg Arg \* 242

<210> 1124 <211> 71 <212> PRT

<213> Homo sapiens

<400> 1124

 Met
 Leu
 Ser
 Tyr
 Ala
 His
 Ile
 Thr
 Leu
 Ala
 Val
 Leu
 Arg
 Ile
 Pro
 Ser

 Ala
 Thr
 Gly
 Cys
 Trp
 Arg
 Ala
 Phe
 Phe
 Thr
 Cys
 Ala
 Ser
 His
 Leu
 Thr
 Thr
 Ala
 Ser
 His
 Leu
 Thr
 Thr
 Thr
 Ala
 Leu
 Phe
 Phe
 Met
 Tyr
 Val
 Arg
 Pro
 Arg
 Pro
 Arg
 Ser
 Asn
 Lys
 Leu
 Ile
 Ser
 Val
 Leu
 Tyr
 Tyr

<210> 1125 <211> 48 <212> PRT

<213> Homo sapiens

<400> 1125

Met Pro Thr Leu Gly Asp Ala Leu Ile Leu Tyr Leu His Leu Val Leu 1 5 10 15 Gly Val Ala Gly Val Leu Gln Pro Pro Gly Pro Arg Pro Ser Gln Ala 20 25 30

Leu Gly Pro Thr Gly Asp Arg Ala Pro Gly Lys Trp Asn Arg Ser \* 35 40 45 47

<210> 1126 <211> 159 <212> PRT <213> Homo sapiens

<400> 1126 Met Phe Leu Ile Val Leu Pro Leu Glu Ser Met Ala His Gly Leu Phe 10 His Glu Leu Gly Asn Cys Leu Gly Gly Thr Ser Val Gly Tyr Ala Ile 25 Val Ile Pro Thr Asn Phe Cys Ser Pro Asp Gly Gln Pro Thr Leu Leu 40 Pro Pro Glu His Val Gln Glu Leu Asn Leu Arg Ser Thr Gly Met Leu 55 Asn Ala Ile Gln Arg Phe Phe Ala Tyr His Met Ile Glu Thr Tyr Gly 70 75 Cys Asp Tyr Ser Thr Ser Gly Leu Ser Phe Asp Thr Leu His Ser Lys 90 Leu Lys Ala Phe Leu Glu Leu Arg Thr Val Asp Gly Pro Arg His Asp 105 Thr Tyr Ile Leu Tyr Tyr Ser Gly His Thr His Gly Thr Gly Glu Trp 115 120 125 Ala Leu Ala Gly Gly Asp Thr Leu Arg Leu Asp Thr Leu Ile Glu Trp 135 140 Trp Arg Glu Lys Asn Gly Ser Phe Cys Ser Pro Pro Tyr Tyr Arg

<210> 1127 <211> 76 <212> PRT <213> Homo sapiens

150

<400> 1127

<210> 1128 <211> 140 <212> PRT <213> Homo sapiens

<400> 1128 Met Gly Ala Gly Leu Ala Val Val Pro Leu Met Gly Leu Leu Glu Ser 5 Ile Ala Val Ala Lys Ala Phe Ala Ser Gln Asn Asn Tyr Arg Ile Asp 2.0 25 Ala Asn Gln Glu Leu Leu Ala Ile Gly Leu Thr Asn Met Leu Gly Ser 40 Leu Val Ser Ser Tyr Pro Val Thr Gly Ser Phe Gly Arg Thr Ala Val 55 60 Asn Ala Gln Ser Gly Val Cys Thr Pro Ala Glu Gly Leu Val Thr Glu 75 Val Leu Val Leu Leu Ser Leu Asp Tyr Leu Thr Ser Leu Phe Tyr Tyr 90 Ile Pro Lys Ser Ala Leu Ala Ala Val Ile Ile Met Ala Val Ala Pro 100 105 Leu Phe Asp Thr Lys Ile Phe Arg Thr Leu Trp Arg Val Lys Arg Leu 115 120 Asp Leu Leu Ser Leu Ser Val Thr Phe Leu Leu Cys 135

<210> 1129 <211> 116 <212> PRT <213> Homo sapiens

<400> 1129

Met Ala Glu Ala Phe Pro Phe Phe Ser Pro Phe Leu Gly Trp Leu Gly 10 Val Phe Leu Thr Gly Ser Asp Thr Ser Ser Asn Ala Leu Phe Ser Ser Leu Gln Ala Thr Thr Ala His Gln Ile Gly Val Ser Asp Val Leu Leu 35 40 Val Ala Ala Asn Thr Ser Gly Gly Val Thr Gly Lys Met Ile Ser Pro 55 Gln Ser Ile Ala Val Ala Cys Ala Ala Thr Gly Leu Val'Gly Lys Glu 75 Ser Asp Leu Phe Arg Phe Thr Leu Lys His Ser Leu Phe Phe Ala Thr 85 90 Ile Val Gly Leu Ile Thr Leu Ala Gln Ala Tyr Trp Phe Thr Gly Met 105 Leu Val His \* 115

<210> 1130 <211> 81 <212> PRT <213> Homo sapiens

<210> 1131 <211> 46 <212> PRT

<213> Homo sapiens

<210> 1132 <211> 46 <212> PRT <213> Homo sapiens

<210> 1133 <211> 87 <212> PRT <213> Homo sapiens

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50 · 55 60

Glu Gln Ala Arg Glu Ser Leu Leu Ser Thr Phe Arg Ile Arg Pro Arg
65 70 75 80

Gly Arg Tyr Val Ser Tyr *
85 86

<210> 1134
<211> 57
<212> PRT
<213> Homo sapiens

<400> 1134

Met Gly Ala Hig Cla Ser De Lyg Wig Lyg Car Gyr Thr Tyr Ala The
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<210> 1135 <211> 57 <212> PRT <213> Homo sapiens

<210> 1136 <211> 105 <212> PRT <213> Homo sapiens

Ala Val Pro Asp Asp Gly Thr Asp Leu Leu Pro Gln Gly Met Arg Thr 65 70 75 80

Ala Cys Thr Thr Arg Arg Ile Phe Lys Tyr Asn Thr Glu Pro Phe Ala 95

Ala Phe Leu Phe Ile Leu Asn Met \*

<210> 1137 <211> 52 <212> PRT <213> Homo sapiens

<210> 1138 <211> 187 <212> PRT <213> Homo sapiens

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<400> 1138 Met Gln Pro Ile Val Ala Lys Ala Leu Val Val Leu Leu Glu Val His Pro Leu Gln Asp Gln Ala Glu Ser Gly Arg Leu Gly His Val His Leu 20 25 Leu Cys Ala Pro Ala Ala Leu Gln His Ala Leu Arg Gly Ile Thr Leu 40 His Asn Gly His His Gln Ala Asp His Leu Pro Asp Leu Met His His 55 60 Glu Ala Leu Ala Leu His Pro Asp His Arg Lys Leu Gln Ala Leu Pro His Lys Gly Phe Leu Ala Val His Leu Gln Asp Val Ala Ala Gly Thr 85 90 Gly Ile Leu Arg Pro Leu Leu Arg Gly Glu Ile Val Glu Val Val Arg 105 Ala Leu Val Ala Gly Gln Glu Pro Val Asp Leu Leu Gln Arg Leu Gly 120 125 Ala Gln Ala Val Gly Leu Ile Leu Asn Val Pro Val Leu Val Arg Lys 135 140 Gly Lys Arg Gly Gln Gln Val Ala Ile Gly Pro Gly Ile Thr Ser Val 155 160 Leu Gly Val Lys Pro Ala Arg Asp Pro Leu Gln Ser Gln Asn Pro Asn 165 170 Val Arg Gly Lys Val Ala Val Asp Leu Phe \* 180 185 186

<210> 1139 <211> 109 <212> PRT <213> Homo sapiens

<400> 1139 Met Trp Gln Lys Ser Leu Leu Ile Leu Ser Phe Arg Val Ser Phe Pro 10 Leu Phe Leu Thr Tyr Asn Tyr Lys Leu Leu Ser Ile Arg Arg Thr Arg 25 20 Pro Leu Ser Ser Phe Phe Ser Lys Leu Leu Gln Ile Ala Val Asn Ser 40 Ile Asn Ser Leu Phe Ser Ala Gly Lys Val Ala Phe Ser Lys His Val 55 60 Cys Leu Leu Pro Gly Gly Leu Lys Ser Met Ile Tyr Cys Ser Ser Met Cys Leu Lys Gln Leu Leu Arg Ser Phe Lys Gln Glu Ser Ser Lys Gly 85 90 Ser Val Leu Ile Met Val Leu Val Phe Leu Gln Ile \*

105 108

<210> 1140 <211> 83 <212> PRT

<213> Homo sapiens

100

<210> 1141 <211> 58 <212> PRT <213> Homo sapiens

82

 Ser Ser Lys Phe Ser Trp Lys Ser Phe Ser Lys Leu Gln Phe Leu Leu

 35
 40
 45

 Leu Leu Lys Phe Arg Tyr Met Cys Ile \*
 55
 57

<210> 1142 <211> 46

<212> PRT

<213> Homo sapiens

<400> 1142

<210> 1143

<211> 58

<212> PRT

<213> Homo sapiens

<400> 1143

<210> 1144

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1144

 Met Ala Tyr Thr Met Ile Pro Val Leu His Phe Phe Cys Cys Glu Thr 1

 Ser Ser Leu Val Arg Thr Lys Val Val Trp Glu Ala Ile Asn Met Val 20

 Phe Ala Lys Ser Met Asn Gly Gly Pro Asp Arg Cys Ile Ala Val Arg 35

 Gln Val Lys Phe Leu Phe Arg Lys Val Ser Phe Ser Glu Lys Ile Asp 50

 His Cys Pro Leu His Asp Gly Asn Ile Leu Leu Pro Gly Pro Trp Glu 65

 Met Ala Pro Tyr Trp Gly Leu Asn Ile Ser Leu Cys His Leu Gln Phe

Arg His Ser Ile Val Ser Leu Ala Arg Cys Ser Leu Gly Glu Gly Gln

Ser Met Leu Trp Cys Pro Cys Leu Thr Ser Ile Ser Val Asp Met Ala

115 - 120 - 120 - 125 - 125

Thr Leu Tyr Ile Asn Ala Ser Ser Ser Leu Ser Ser Lys Gly Lys Lys

130 \* 135 - 135 - 135 - 140

Ala Asp \*

146 - 146

<210> 1145 <211> 103 <212> PRT <213> Homo sapiens

<400> 1145 Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Gly 5 10 Ser Val Ala Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser 20 25 Pro Gly Lys Thr Ala Ser Ile Thr Cys Ser Gly Asp Lys Leu Gly Asp 40 Lys Tyr Ala Ser Trp Tyr Gln Gln Lys Ala Gly Gln Ser Pro Val Leu 55 60 Val Ile Tyr Glu Asp Ser Arg Arg Pro Ser Gly Ile His Lys Arg Phe 70 Tyr Gly Ser Asn Ser Gly Thr Thr Ala Thr Leu Thr Ile Ser Gly Thr 85 90 Gln Ala Met Asp Glu Gly \*

<210> 1146 <211> 77 <212> PRT <213> Homo sapiens

100 102

<210> 1147 <211> 118 <212> PRT

## <213> Homo sapiens

<400> 1147 Met Asn Pro Ser Ala Ser Leu Val Cys Leu Leu Phe Ala Phe Ser Ser 1 5 10 Cys Arg Ile Trp Ser Val Leu Cys Gln Leu Cys Val Pro Ser Pro Trp 20 25 Pro Ser Pro Leu Cys Leu Cys Pro Gln Thr Asp Val Ala Pro Ile Cys 40 45 Ala Val Gln Pro Ser Leu Phe Cys Leu Gly Ser Arg Glu Pro Leu Trp 55 60 Thr Val Leu Val Gly Ser Cys Pro Leu Arg Ala Phe Thr Asn Leu Ser 75 80 Val Arg Pro Pro Pro Gly His His Ser Ile His Leu Leu Thr Trp Leu 85 90 Ala Ser Ser Ser Ala Ala Ala Thr Thr Ala Ala Ser Thr Ala Ser Gly 100 105 Ala Pro His Ser Val \* 115 117

<210> 1148 <211> 399 <212> PRT

<213> Homo sapiens

<400> 1148 Met Trp Ala Ala Val Gly Gly Phe Leu Phe Ala Pro Arg Cys Phe Leu 10 Leu Pro Trp Pro Leu Arg Ala Pro Leu Ser Ser Leu Phe Val Leu Pro 25 Arg Leu Leu Trp Pro Ile Pro Tyr Pro Val Leu Ala Ser Val Cys 40 Pro Cys Val Pro Gly Gly Arg Phe Phe Gly Pro Leu Tyr Pro Arg Asp 55 Leu Arg Leu Leu Arg Cys Val Pro Gly Glu Leu Thr Gly Ala Ala Pro 70 75 Arg Thr Leu Pro Gly Cys Asp Leu Asn Cys Leu Gly Leu Gly Arg Glu 90 Ala Ala Val Pro Arg Leu Leu Arg Leu Thr Arg Asp Pro Ala Arg Pro 100 105 Ser Cys Arg Thr Leu Gly Val His Ala Val Pro Arg Arg Ala Phe Gly 120 125 Phe Tyr Ala Val Pro Arg Arg Asp Pro Arg Phe Tyr Ala Val Pro Arg 135 140 Arg Val Pro Arg Leu Tyr Ala Val Pro His Pro Ala Leu Arg Val Tyr 150 155 160 Ala Val Pro Arg Arg Thr Phe Arg Val Tyr Ala Val Pro His Pro Ala 170 Leu Arg Val Tyr Ala Val Pro Arg Arg Ala Leu Gly Leu Tyr Val Val 180 185 Pro Gln Arg Ala Leu Arg Val Tyr Ala Val Pro Arg Arg Thr Phe Arg 195 200 205 Val Tyr Ala Val Pro His Pro Ala Leu Arg Leu Tyr Ala Val Ala Arg 215 220 Arg Ala Leu Arg Phe Tyr Val Val Pro Gln Arg Ala Leu Arg Val Tyr

225 230 235 Ala Val Pro Arg Leu Pro Gly Arg Ala Thr Phe Arg Asp Leu Arg Pro 245 250 Leu Leu Arg Leu Leu Pro Leu Gly Gly Arg Arg Val Leu Gly Leu 260 265 Pro Leu Ser Leu Pro Ala Gly Leu Ala Leu Arg Ala Ala Ser Arg Ala 280 Arg Pro Leu His Leu Leu Arg Ala Ala Cys Leu Leu Pro Ser Leu Gly 300 295 His Leu Gly Thr Leu Arg Gly Ser Leu Leu Gly Leu Ser Leu Ala Val 310 315 320 Arg Pro Pro Arg Ala Pro Arg Leu Gly Leu Arg Ala Pro Val Trp Pro 325 330 335 Ala Ala Ser Cys Leu Leu His Ser Gly Gly Ala Pro Arg Arg Leu Leu 345 Cys Ala Leu Ala Pro Leu Arg Pro Phe Cys Leu Pro Ala Arg Gly Ser 360 Trp Leu Ser Gly Ser Leu Ser Gln Arg Arg Gly Asp Leu Arg Arg Pro 370 375 380 Leu Gly Thr Arg Gly Asn Pro Leu Arg Leu Arg Gly Leu Gly His 390 395

<210> 1149 <211> 67 <212> PRT <213> Homo sapiens

<210> 1150 <211> 70 <212> PRT <213> Homo sapiens

Leu Arg Lys Ala Leu \* 65 69

<210> 1151

<211> 48

<212> PRT

<213> Homo sapiens

<400> 1151

Met Gly Ala Gly Cys Thr Pro Val Val Leu Gly Ala Ala Leu Trp Leu

1 5 , 10 15

Trp Arg Trp Phe Ser Arg Trp Gly Leu Gly Gly Leu Cys Trp Arg Pro

20 25 30

Cys Thr Cys Thr Pro Cys His Ser Ala Ser Pro Gly Ala Gly Arg \* 35 40 45 47

<210> 1152

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1152

<210> 1153

<211> 61

<212> PRT

<213> Homo sapiens

<400> 1153

<210> 1154

<211> 75

<212> PRT <213> Homo sapiens

<400> 1154

<210> 1155

<211> 68

<212> PRT

<213> Homo sapiens

<400> 1155

<210> 1156

<211> 60

<212> PRT

<213> Homo sapiens

<400> 1156

<210> 1157

<211> 776

<212> PRT

## <213> Homo sapiens

<400> 1157 Met Leu Phe Ile Val Thr Ala Leu Leu Cys Cys Gly Leu Cys Asn Gly 1 5 10 Val Leu Ile Glu Glu Thr Glu Ile Val Met Pro Thr Pro Lys Pro Glu 25 Leu Trp Ala Glu Thr Asn Phe Pro Leu Ala Pro Trp Lys Asn Leu Thr 45 Leu Trp Cys Arg Ser Pro Ser Gly Ser Thr Lys Glu Phe Val Leu Leu 55 Lys Asp Gly Thr Gly Trp Ile Ala Thr Arg Pro Ala Ser Glu Gln Val 70 75 Arg Ala Ala Phe Pro Leu Gly Ala Leu Thr Gln Ser His Thr Gly Ser 90 Tyr His Cys His Ser Trp Glu Glu Met Ala Val Ser Glu Pro Ser Glu 105 Ala Leu Glu Leu Val Gly Thr Asp Ile Leu Pro Lys Pro Val Ile Ser 120 Ala Ser Pro Thr Ile Arg Gly Gln Glu Leu Gln Leu Arg Cys Lys Gly 135 140 Trp Leu Ala Gly Met Gly Phe Ala Leu Tyr Lys Glu Gly Glu Gln Glu 150 155 Pro Val Gln Gln Leu Gly Ala Val Gly Arg Glu Ala Phe Phe Thr Ile 165 170 Gln Arg Met Glu Asp Lys Asp Glu Gly Asn Tyr Ser Cys Arg Thr His 185 190 Thr Glu Lys Arg Pro Phe Lys Trp Ser Glu Pro Ser Glu Pro Leu Glu 200 Leu Val Ile Lys Glu Met Tyr Pro Lys Pro Phe Phe Lys Thr Trp Ala 215 220 Ser Pro Val Val Thr Pro Gly Ala Arg Val Thr Phe Asn Cys Ser Thr 230 235 Pro His Gln His Met Ser Phe Ile Leu Tyr Lys Asp Gly Ser Glu Ile 250 Ala Ser Ser Asp Arg Ser Trp Ala Ser Pro Gly Ala Ser Ala Ala His 260 265 Phe Leu Ile Ile Ser Val Gly Ile Gly Asp Gly Gly Asn Tyr Ser Cys 280 Arg Tyr Tyr Asp Phe Ser Ile Trp Ser Glu Pro Ser Asp Pro Val Glu 295 300 Leu Val Val Thr Glu Phe Tyr Pro Lys Pro Thr Leu Leu Ala Gln Pro 310 315 Gly Pro Val Val Phe Pro Gly Lys Ser Val Ile Leu Arg Cys Gln Gly 330 Thr Phe Gln Gly Met Arg Phe Ala Leu Leu Gln Glu Gly Ala His Val 345 Pro Leu Gln Phe Arg Ser Val Ser Gly Asn Ser Ala Asp Phe Leu Leu 360 His Thr Val Gly Ala Glu Asp Ser Gly Asn Tyr Ser Cys Ile Tyr Tyr 375 380 Glu Thr Thr Met Ser Asn Arg Gly Ser Tyr Leu Ser Met Pro Leu Met 390 395 Ile Trp Val Thr Asp Thr Phe Pro Lys Pro Trp Leu Phe Ala Glu Pro 410 Ser Ser Val Val Pro Met Gly Gln Asn Val Thr Leu Trp Cys Arg Gly 425 Pro Val His Gly Val Gly Tyr Ile Leu His Lys Glu Gly Glu Ala Thr

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440
Ser Met Gln Leu Trp Gly Ser Thr Ser Asn Asp Gly Ala Phe Pro Ile
       455
                           460
Thr Asn Ile Ser Gly Thr Ser Met Gly Arg Tyr Ser Cys Cys Tyr His
     470
                                475 ' 480
Pro Asp Trp Thr Ser Ser Ile Lys Ile Gln Pro Ser Asn Thr Leu Glu
            485
                             490 495
Leu Leu Val Thr Gly Leu Leu Pro Lys Pro Ser Leu Leu Ala Gln Pro
                          505
Gly Pro Met Val Ala Pro Gly Glu Asn Met Thr Leu Gln Cys Gln Gly
                      520
                                        525
Glu Leu Pro Asp Ser Thr Phe Val Leu Leu Lys Glu Gly Ala Gln Glu
         535
Pro Leu Glu Gln Gln Arg Pro Ser Gly Tyr Arg Ala Asp Phe Trp Met
                550
                                 555
Pro Ala Val Arg Gly Glu Asp Ser Gly Ile Tyr Ser Cys Val Tyr Tyr
                 570
            565
Leu Asp Ser Thr Pro Phe Ala Ala Ser Asn His Ser Asp Ser Leu Glu
         580
                         585
Ile Trp Val Thr Asp Lys Pro Pro Lys Pro Ser Leu Ser Ala Trp Pro
                      600
Ser Thr Met Phe Lys Leu Gly Lys Asp Ile Thr Leu Gln Cys Arg Gly
                   615
                                    620
Pro Leu Pro Gly Val Glu Phe Val Leu Glu His Asp Gly Glu Glu Ala
             630
                                 635
Pro Gln Gln Phe Ser Glu Asp Gly Asp Phe Val Ile Asn Asn Val Glu
            645
                             650
Gly Lys Gly Ile Gly Asn Tyr Ser Cys Ser Tyr Arg Leu Gln Ala Tyr
                 665
Pro Asp Ile Trp Ser Glu Pro Ser Asp Pro Leu Glu Leu Val Gly Ala
                      680
Ala Gly Pro Val Ala Gln Glu Cys Thr Val Gly Asn Ile Val Arg Ser
                   695
Ser Leu Ile Val Val Val Val Ala Leu Gly Val Val Leu Ala Ile
705 710 715
Glu Trp Lys Lys Trp Pro Arg Leu Arg Thr Arg Gly Ser Glu Thr Asp
                             730
            725
Gly Arg Asp Gln Thr Ile Ala Leu Glu Glu Cys Asn Gln Glu Gly Glu
                745
Pro Gly Thr Pro Ala Asn Ser Pro Ser Ser Thr Ser Gln Arg Ile Ser
                       760
Val Glu Leu Pro Val Pro Ile *
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<210> 1158 <211> 80 <212> PRT <213> Homo sapiens

Asn Thr Arg Arg Val Glu Phe Trp Asn Gln Met Lys Leu Leu Gly Glu
50 55 60

Ser Val Gly Ile Phe Gly Thr Ala Val Ile Leu Ala Thr Asp Gly \*
65 70 79

<210> 1159 <211> 132 <212> PRT <213> Homo sapiens

<400> 1159 Met Ser Ser Gly Thr Glu Leu Leu Trp Pro Gly Ala Ala Leu Leu Val Leu Leu Gly Val Ala Ala Ser Leu Cys Val Arg Cys Ser Arg Pro Gly 25 Ala Lys Arg Ser Glu Lys Ile Tyr Gln Gln Arg Ser Leu Arg Glu Asp 40 Gln Gln Ser Phe Thr Gly Ser Arg Thr Tyr Ser Leu Val Gly Gln Ala 55 Trp Pro Gly Pro Leu Ala Asp Met Ala Pro Thr Arg Lys Asp Lys Leu 75 70 Leu Gln Phe Tyr Pro Ser Leu Glu Asp Pro Ala Ser Ser Arg Tyr Gln 90 Asn Phe Ser Lys Gly Ser Arg His Gly Ser Glu Glu Ala Tyr Ile Asp 105 110 Pro Thr Ala Ile Lys Tyr Phe Leu Thr Gln Ala Thr Ala Ser Ile Ile 115 120 Leu Leu Ile Ala

<210> 1160 <211> 167 <212> PRT

130 132

<213> Homo sapiens

<400> 1160 Met Val Gly Leu Gly Gly Met Ser Gln Leu Leu Leu Ala Ser Leu Leu Pro Pro Val Pro Gln Gly Ser Pro Thr Arg Arg Lys Leu Pro Ala Ser 25 Leu Leu Val Ser Thr Ala Leu Ile Ser Pro Val Cys Val Arg Gly Trp 35 40 Met Trp Gln Asn Leu Gln Asn Arg Ile His Gly Ser His Thr Ser Ala 55 Arg Arg Val Pro Ser Leu Pro Gly Ala Gly Gln Val Gly Val Arg Trp 75 Glu Ala Gly Pro Ala Cys Arg Thr Gln Pro Ser Pro Gln Asn Leu Ala 90 Pro Arg Pro His Pro Ser Ala Ala Gln Leu Ile Glu Asn Ala Ala Leu 105 Arg Ser Ala Met Ser Gly Glu Arg Leu Phe Pro Glu Gly Gln Glu His 125 120 Leu Gly Pro Leu Val Ala Pro Arg Val Pro Met Gly Gly Ala Leu Cys

130 140

Pro Pro Leu Pro Ser Leu Ser Cys Ala Ile Cys Lys Val Gly Ala Ala
145 150 155 166

Arg Glu Ala Gly Gly Arg \*
165 166

<210> 1161 <211> 84 <212> PRT <213> Homo sapiens

<210> 1162 <211> 80 <212> PRT

<213> Homo sapiens

83

Leu Pro Ser Leu Lys Phe Ala Gln Asp Ser Pro Pro Arg Ala Phe \* 65 70 75 79

<210> 1163 <211> 71 <212> PRT <213> Homo sapiens

<210> 1164 <211> 56 <212> PRT

<213> Homo sapiens

<210> 1165
<211> 97
<212> PRT
<213> Homo sapiens
<221> misc\_feature
<222> (1)...(97)
<223> Xaa = any amino acid or nothing

<210> 1166 <211> 48

<212> PRT <213> Homo sapiens

<210> 1167 <211> 274 <212> PRT <213> Homo sapiens

<400> 1167 Met Glu Ala Pro Leu Ser His Leu Glu Ser Arg Tyr Leu Pro Ala His 10 Phe Ser Pro Leu Val Phe Phe Leu Leu Ser Ile Met Met Ala Cys 25 Cys Leu Val Ala Phe Phe Val Leu Gln Arg Gln Pro Arg Cys Trp Glu Ala Ser Val Glu Asp Leu Leu Asn Asp Gln Val Thr Leu His Ser Ile 55 Arg Pro Arg Glu Glu Asn Asp Leu Gly Pro Ala Gly Thr Val Asp Ser 70 Ser Gln Gly Gln Gly Tyr Leu Glu Glu Lys Ala Ala Pro Cys Cys Pro 90 Ala His Leu Ala Phe Ile Tyr Thr Leu Val Ala Phe Val Asn Ala Leu 105 Thr Asn Gly Met Leu Pro Ser Val Gln Thr Tyr Ser Cys Leu Ser Tyr 115 120 125 Gly Pro Val Ala Tyr His Leu Ala Ala Thr Leu Ser Ile Val Ala Asn 135 140 Pro Leu Ala Ser Leu Val Ser Met Phe Leu Pro Asn Arg Ser Leu Leu 150 155 160 Phe Leu Gly Val Leu Ser Val Leu Gly Thr Cys Phe Gly Gly Tyr Asn 170 Met Ala Met Ala Val Met Ser Pro Cys Pro Leu Leu Gln Gly His Trp 180 185 Gly Gly Glu Val Leu Ile Val Ser Ile Arg Pro Val Ala Ser Trp Val 200 Leu Phe Ser Gly Cys Leu Ser Tyr Val Lys Val Met Leu Gly Val Val 215 220 Leu Arg Asp Leu Ser Arg Ser Ala Leu Leu Trp Cys Gly Ala Ala Val 230 235 Gln Leu Gly Ser Leu Leu Gly Ala Leu Leu Met Phe Pro Leu Val Asn 250 Val Leu Arg Leu Phe Ser Ser Ala Asp Phe Cys Asn Leu His Cys Pro Ala \*

<210> 1168 <211> 230 <212> PRT <213> Homo sapiens

<400> 1168 Met Arg Ile Cys Asn Leu Ile Ser Met Met Leu Leu Cys His Trp 5 10 Asp Gly Cys Leu Gln Phe Leu Val Pro Met Leu Gln Asp Phe Pro Arg 25 Asn Cys Trp Val Ser Ile Asn Gly Met Val Asn His Ser Trp Ser Glu 40 Leu Tyr Ser Phe Ala Leu Phe Lys Ala Met Ser His Met Leu Cys Ile Gly Tyr Gly Arg Gln Ala Pro Glu Ser Met Thr Asp Ile Trp Leu Thr 70 Met Leu Ser Met Ile Val Gly Ala Thr Cys Tyr Ala Met Phe Ile Gly 85 90 His Ala Thr Ala Leu Ile Gln Ser Leu Asp Ser Ser Arg Arg Gln Tyr 100 105 Gln Glu Lys Tyr Lys Gln Val Glu Gln Tyr Met Ser Phe His Lys Leu 120 125 Pro Ala Asp Phe Arg Gln Lys Ile His Asp Tyr Tyr Glu His Arg Tyr 135 140 Gln Gly Lys Met Phe Asp Glu Asp Ser Ile Leu Gly Glu Leu Asn Gly 150 155 Pro Leu Arg Glu Glu Ile Val Asn Phe Asn Cys Arg Lys Leu Val Ala 165 170 Ser Met Pro Leu Phe Ala Asn Ala Asp Pro Asn Phe Val Thr Ala Met 180 185 190 Leu Thr Lys Leu Lys Phe Glu Val Phe Gln Pro Gly Asp Tyr Ile Ile 200 Pro Arg Arg His His Arg Glu Glu Asp Val Leu His Pro Ala Arg Arg Gly Gln Arg Ala His \* 229

<210> 1169 <211> 213 <212> PRT <213> Homo sapiens

85 90 Val Leu Met Ala Gly Ala Leu Ala Val Leu Ser Glu Gly Leu Gln Gly 105 Leu Asp Asp Glu Ala His Val Val Leu Ile Asp Val Glu Pro Gln Gln 120 125 Pro Gln Ala Ala Arg Gly Ala Ala Ala His Asp Val Gln Glu Leu Gln 135 140 Arg Leu Ala Tyr Gln Val Val Gly Phe Val Val Leu Thr Ala Gln 145 150 155 Glu Val Leu Gln Val Pro Val Val Val Leu Thr Gln Gln Leu Gln Lys 165 170 Ala Gln Asp Gly Leu His Asp Glu His Gly Cys Ala His Leu Thr Ala 180 185 Leu His Thr Phe Ala His Leu Val Pro Pro Ala Gln Ala Gly Ala Gln 200 Arg Val Ala Gly \* 210 212

<210> 1170 <211> 51 <212> PRT <213> Homo sapiens

<210> 1171 <211> 157 <212> PRT <213> Homo sapiens

<400> 1171 Met Leu Val Pro Leu Asn Leu Cys Leu Gln Ser Thr Leu Ala Leu Val 1 . 5 10 Ser Leu Pro Leu Pro Gly Ile Gly Arg Ala Phe Cys Glu Trp Leu Ser 25 Gly Thr Phe Lys Ala Arg Arg Gln Gly Pro Lys Ala Lys Arg Glu Leu 35 . 40 Trp Asp Val Pro Ser Pro Val Arg Gly Trp Pro Trp Gly Phe Arg Leu 50 55 Arg Gly Val Pro Gly Pro Val Ser Pro Ala Phe Gly Pro Phe Gly Glu 70 Phe Gly Glu Glu Val Pro Thr Ala Arg Pro Gly Asp Val Arg Gly Ala 90 Ala Leu Thr Phe Ile Val Gly Val Ser Ser Glu Val Ser Val Gln Arg

<210> 1172 <211> 69 <212> PRT <213> Homo sapiens

<210> 1173 <211> 75 <212> PRT <213> Homo sapiens

<210> 1174 <211> 77 <212> PRT <213> Homo sapiens

<210> 1175 <211> 59 <212> PRT <213> Homo sapiens

<210> 1176 <211> 55 <212> PRT <213> Homo sapiens

<210> 1177 <211> 86 <212> PRT <213> Homo sapiens

 Ser Trp Val
 Arg Thr Ala
 Trp Met Leu Gly Ser Thr Ser Arg Thr Arg

 50
 55
 60

 Gly Leu Ser Arg Leu Trp Leu Thr Val Thr Ala Val Met Pro Pro Met
 70

 65
 75

 80

 Pro Leu Ala Pro Pro \*

 85

<210> 1178
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 1178 Met Met Pro Leu Leu Ser Leu Ile Phe Ser Ala Leu Phe Ile Leu Phe 10 Gly Thr Val Ile Val Gln Ala Phe Ser Asp Ser Asn Asp Glu Arg Glu 25 Ser Ser Pro Pro Glu Lys Glu Glu Ala Gln Glu Lys Thr Gly Lys Thr 40 Glu Pro Ser Phe Thr Lys Glu Asn Ser Ser Lys Ile Pro Lys Lys Gly 55 Phe Val Glu Val Thr Glu Leu Thr Asp Val Thr Tyr Thr Ser Asn Leu 70 75 Val Arg Leu Arg Pro Gly His Met Asn Val Val Leu Ile Leu Ser Asn 85 90 Ser Thr Lys Thr Ser Leu Leu Gln Lys Phe Ala Leu Glu Val Tyr Thr 100 105 Phe Thr Gly Ser Ser Cys Leu His Phe Ser Phe Leu Ser Leu Asp Lys 115 120 His Arg Glu Trp Leu Glu Tyr Leu Leu Glu Phe Ala Gln Asp Ala Ala 130 135 140 Pro Ile Pro Asn Gln Tyr Asp Lys His Phe Met Glu Arg Asp Tyr Thr 150 155 Gly Tyr Val Leu Ala Leu Asn Gly His Lys Lys Tyr Phe Cys Leu Phe 170 Lys Pro Gln Lys Thr Val Glu Glu Gly Gly Lys Pro \*

185

<210> 1179 <211> 55 <212> PRT <213> Homo sapiens

180

<210> 1180 <211> 81 <212> PRT <213> Homo sapiens

<400> 1180

 Met Ala
 Phe Leu Leu Ser Thr Leu Leu Asn His Tyr Leu Ala Cys Lys

 1
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 15

 His Ser Ser Ser Glu Leu Trp Leu Gln Ser Ser Leu Asn Ser Leu Asn Leu Gly Lys
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<210> 1181 <211> 69 <212> PRT <213> Homo sapiens

<400> 1181

<210> 1182 <211> 430 <212> PRT <213> Homo sapiens

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Ala Lys Val Val Lys Ala Ser Ser Pro Ser Tyr Leu Ala Glu Gly Lys
                  70
                         75
Ile Arg Cys Leu Ala Gln Pro His Pro Gly Thr Gly Val Pro Arg Ala
              85
                                90
Ala Ala Glu Leu Pro Leu Glu Ala Glu Lys Ile Lys Thr Gly Thr Gln
                            105
Lys Gln Ala Lys Thr Asp Met Ala Phe Lys Thr Ser Val Ala Val Glu
                         120
                                          125
Met Ala Gly Ala Pro Ser Trp Thr Lys Val Ala Glu Glu Gly Asp Lys
           135
Pro Pro His Gly Pro Arg Cys Pro Asn His Ala Cys Gln Arg Leu Gly
               150
Gly Leu Ser Ala Pro Pro Trp Ala Lys Pro Glu Asp Arg Gln Thr Gln
                               170
Pro Gln Pro His Gly His Val Pro Gly Lys Thr Thr Gln Gly Gly Pro
                            185 190
Cys Pro Ala Ala Cys Glu Val Gln Gly Met Leu Val Pro Pro Met Ala
                         200
Pro Thr Gly His Ser Thr Cys Asn Val Glu Ser Trp Gly Asp Asn Gly
                     215
                                       220
Ala Thr Arg Ala Gln Pro Ser Met Pro Gly Gln Ala Val Pro Cys Gln
                 230
                                   235
Glu Asp Thr Val Gly Ser Leu Leu Ala Ser Leu Cys Ala Glu Val Ala
             245
                               250
Gly Val Leu Ala Ser Gln Glu Asp Leu Arg Thr Leu Leu Ala Lys Ala
         260
                           265
Leu Ser Gln Gly Glu Val Trp Ala Ala Leu Asn Gln Ala Leu Ser Lys
       275
                         280
                                 285
Glu Val Leu Gly Ala Thr Val Thr Lys Ala Leu Pro Gln Ser Met Leu
                     295
                                    300
Ser Met Ala Leu Val Lys Ala Leu Ser Trp Ser Glu Leu Arg Leu Thr
                 310
                                    315
Leu Ser Arg Ala Leu Ser Arg Gly Glu Leu Arg Ala Glu Leu Thr Lys
             325
                                330
Val Met Gln Gly Lys Leu Ala Glu Val Leu Ser Lys Ala Leu Thr Glu
         340
                           345
Glu Glu Trp Val Ala Leu Ser Gln Ala Leu Cys Gln Gly Glu Leu Gly
                        360
                                          365
Ala Leu Leu Ser Gln Ser Trp Cys Arg Val Ala Leu Arg Thr Gly Thr
                    375
Ile Leu Pro Lys Ala Ala Ser Lys Ser Thr Gly Ser Gly Val Thr Lys
385 390
                          395
Thr Pro Ala Leu Val Lys Val Ala Cys Arg Arg Ser Pro Ser Ala Ala
                    410
Trp Gly Pro Ser Leu Gly Pro Val Arg Pro Gln Thr Ser Lys
                             425
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<210> 1183 <211> 53

<212> PRT <213> Homo sapiens

<400> 1183

Met Thr Phe Ile Leu Ser Arg Pro Pro Phe Phe Phe Leu Phe Ser Lys

1 5 10 15

Arg Ser Cys Ser Gly Ala Arg Trp Ser Arg Trp Pro Gln Phe Gly Tyr

20 25 30

Ser Thr Ser Pro Pro Gly Ser Met Phe Phe Ser Ser Pro Pro Ser Arg
35 40 45

Gly Ile Pro Ala \*
50 52

<210> 1184 <211> 56 <212> PRT <213> Homo sapiens

<210> 1185 <211> 294 <212> PRT <213> Homo sapiens

<400> 1185 Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro Leu 10 Leu Val Ala Glu Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe Ala Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu Leu 40 Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe Leu 50 55 Gly Val Lys Ala Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly Thr 65 . 70 75 Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val Arg 85 90 Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe Phe 105 Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg Cys 120 Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His Phe 135 140 Gln Glu Phe Asn Pro Ala Leu Ser Pro Gln Arg Ser Pro Pro Gly Pro 150 155 160 Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser 170 Arg Gly Ala Pro Ile Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu 185 Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala 200

<210> 1186 <211> 57 <212> PRT

<213> Homo sapiens

<210> 1187 <211> 191 <212> PRT <213> Homo sapiens

<400> 1187

Met Asp Leu Asp Asn Ala Lys Tyr Ser Leu Leu Gly Phe Ala Leu Phe 10 Trp Val Val Gly Phe Phe Phe Val Cys Leu Phe Trp Phe Leu Val 20 25 Phe Leu Pro Trp Cys Lys Thr Val Glu Ser Cys Leu Phe Thr Gly Leu 40 Gly Ser Ile Glu Val Cys Val Ser Ser Val Arg Phe Leu Leu Arg Thr 60 Ile Cys Ile Phe Asn Asn Ser Thr Ser Ser Arg Pro Ser Arg Asn 70 Glu Arg Gly Leu Val Ser Ser Pro Glu Leu Ala Leu Glu Cys Val His 85 90 Leu Ala Ala His Gly Leu Val Ala Leu Arg Gly Leu Ile Gln Leu Pro 105 Leu Gln Leu Pro Ala Val Gly Val Asp Ala Leu Gly Leu Leu Cys 120 125 Leu Leu Gln Leu Pro Leu Glu Leu Leu Asp Pro Gly Ile Ala Phe Leu 135 140 Cys Leu Leu Val Leu Leu Gly His Leu Ala Leu Val Leu His Leu

<210> 1188 <211> 216 <212> PRT <213> Homo sapiens

<400> 1188 1 5 Leu Asn Val Glu Pro Ala Gly Ala Thr Leu Ile Arg Ile Pro Leu Arg 20 25 Gln Val His Pro Gly Arg Arg Thr Leu Asn Leu Leu Arg Gly Trp Gly 40 Lys Pro Ala Glu Leu Pro Lys Leu Gly Ala Pro Ser Pro Gly Asp Lys 55 Pro Ala Ser Val Pro Leu Ser Lys Phe Leu Asp Ala Gln Tyr Phe Gly Glu Ile Gly Leu Gly Thr Pro Pro Gln Asn Phe Thr Val Ala Phe Asp 90 Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Arg Arg Cys His Phe Phe 100 105 Ser Val Pro Cys Trp Phe His His Arg Phe Asn Pro Asn Ala Ser Ser 120 Ser Phe Lys Pro Ser Gly Thr Lys Phe Ala Ile Gln Tyr Gly Thr Gly 135 140 Arg Val Asp Gly Ile Leu Ser Glu Asp Lys Leu Thr Ile Gly Gly Ile 155 150 Lys Gly Ala Ser Val Ile Phe Gly Glu Ala Leu Trp Gly Ile Gln Pro 165 170 Gly Ser Ser Leu Phe Pro Ala Pro Met Gly Tyr Trp Gly Leu Gly Phe 185 Pro Ile Leu Val Leu Trp Glu Gly Ile Ser Ala Pro Ala Gly Cys Thr Gly Gly Ala Gly Ala Ile Gly \* 210

<210> 1189 <211> 176 <212> PRT <213> Homo sapiens

Ala Leu Ala Ala Ala Val Pro Ser Met Thr Gln Leu Leu Gly Asp Pro 55 Gln Ala Gly Ile Arg Arg Asn Val Ala Ser Ala Leu Gly Asn Leu Gly 70 75 Rro Glu Gly Leu Gly Glu Glu Leu Leu Gln Cys Glu Val Pro Gln Arg 90 Leu Leu Glu Met Ala Cys Gly Asp Pro Gln Pro Asn Val Lys Glu Ala 105 110 Ala Leu Ile Ala Leu Arg Ser Leu Gln Gln Glu Pro Gly Ile His Gln 125 120 Val Leu Val Ser Leu Gly Ala Ser Glu Lys Leu Ser Leu Leu Ser Leu 135 Gly Asn Gln Ser Leu Pro His Ser Ser Pro Arg Pro Ala Ser Ala Lys 145 150 155 160 His Cys Arg Lys Leu Ile His Leu Leu Arg Pro Ala His Ser Met \* 170

<210> 1190 <211> 58 <212> PRT

<213> Homo sapiens

<400> 1190 t Ala Glv Thr

 Met Ala Gly Thr Ala Gln Leu Leu Gly Leu Lys Gln Leu Ile Gly Leu

 1
 5
 10
 15

 Glu Leu Leu Thr Ala Gln Cys Gly Gln Ile Thr Gly Tyr Arg Asp Arg
 20
 25
 30

 Arg Glu Glu Leu Leu Pro Pro Arg Phe Leu Ala Thr Gly Pro Pro Ser
 35
 45

 Cys His Pro Pro Ser Gln Thr Val Pro
 \*
 \*

 50
 55
 57

<210> 1191 <211> 88 <212> PRT <213> Homo sapiens

<400> 1191

 Met Gly Ile Cys
 Leu Thr Trp Lys
 Pro Pro Thr Gly Val Ser Val Ile

 1
 5
 10
 10
 15

 Leu Ile Leu Leu Ser Glu Leu His Met Lys
 Ser Pro Gly Arg Leu Lys
 30

 Pro Lys
 Ser Ser Pro His Phe Ser Thr Val Leu Thr Pro Leu Thr Phe
 45

 Met Tyr Pro Gly Leu Ala Leu Leu His Ser Leu Tyr Trp His Trp Gln
 55
 60

 Glu Asn Gly Glu Ile Leu Cys Arg Ala Ala Glu Pro Lys Phe Ala Gln
 65
 70
 75
 80

 Glu Ser Lys Cys
 Thr Ile Tyr \*
 85
 87
 87
 87
 87
 88
 87

<210> 1192 <211> 136 <212> PRT <213> Homo sapiens

<400> 1192 Met Val Cys Leu Arg Leu Pro Gly Gly Ser Cys Met Ala Val Leu Thr 1 5 10 Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr 20 25 Arg Pro Arg Phe Leu Glu Tyr Ser Thr Ser Glu Cys His Phe Phe Asn 40 Gly Thr Glu Arg Val Arg Tyr Leu Asp Arg Tyr Phe His Asn Gln Glu 55 Glu Asn Val Arg Phe Asp Ser Asp Val Gly Glu Phe Arg Ala Val Thr 70 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu 85 90 Leu Gly Thr Ala Arg Arg Thr Ser Trp Ser Arg Ser Gly Ala Gly Trp 100 105 Thr Thr Thr Ala Asp Thr Thr Thr Gly Leu Trp Arg Ala Ser Gln Cys 115 120 Ser Gly Glu Ser Ile Leu Arg \* 130

<210> 1193 <211> 99 <212> PRT <213> Homo sapiens

<210> 1194 <211> 50 <212> PRT <213> Homo sapiens

<400> 1194

<210> 1195 <211> 58 <212> PRT <213> Homo sapiens

<210> 1196 <211> 132 <212> PRT <213> Homo sapiens

<400> 1196 Met Leu Pro Asn Ser Ser Ser Leu Trp Leu Val Met Arg Ile Leu Ile 10 Phe Cys Val Ile Pro Ala Gly Gly Val Leu Gly Ala Pro Thr Ala Ala 20 25 Gly Leu Arg Pro Thr Gly Asp Val Ala Leu Arg Arg Pro Ala Gly Ser 35 40 Val Glu Pro Ser Gly Ser Arg Gly Leu Arg Ala Ser Val Cys Gln Arg 55 60 Leu Ser Met Phe Leu Ala His Phe Leu Arg Gly His Phe Leu Trp Trp 75 Ile Leu Asp Gly Gln Arg Leu Gly Phe Pro Leu Ser Leu Ala Thr Trp 85 90 Asn Arg Arg Lys Lys Ser Leu Gln His Leu Leu His Lys His Val Leu 100 105 Pro Val Arg Arg His Ala Gly Pro Cys Arg Gly Pro Gln Thr Thr Ala 115 120 Arg Gly Pro Arg 130 132

<210> 1197 <211> 64

<212> PRT <213> Homo sapiens <400> 1197 Met Pro Tyr Leu Ile Leu Phe Phe Ala Val Tyr Ile Leu Tyr Lys Ile 5 10 Leu Val Lys Val His Leu Phe Ile Ala Glu Ile Ala Leu Tyr Asp Phe 30 20 25 Leu Lys Phe Phe Glu Leu Tyr Gly Ile Cys Met Phe Lys Thr Leu Thr 45 40 Cys Leu Val Val Thr Thr Leu Ile Phe Ile Asn Leu Leu Ser Leu \* 55 60 63 <210> 1198 <211> 53 <212> PRT <213> Homo sapiens <400> 1198 Met Leu Gly Pro Pro Glu Ala Arg Leu Ser Leu Cys Ile Leu Leu Trp 5 10 Ile Ser Ile Leu Cys Pro Trp Tyr Arg Phe Thr Leu Tyr Cys Ser Ser 25 30 Trp Pro Tyr Pro Ile Phe Asp Ser Gly Tyr Arg Pro Leu Phe Gly Thr 35 Thr Leu Leu Phe \* 50 52 <210> 1199 <211> 50 <212> PRT <213> Homo sapiens <221> misc\_feature <222> (1) ... (50) <223> Xaa = any amino acid or nothing <400> 1199 Met Leu Arg Leu Gly Leu Cys Ala Ala Leu Leu Cys Val Cys Arg 1 5 10 Pro Gly Ala Val Arg Ala Asp Cys Trp Leu Ile Glu Gly Asp Lys Gly 25 Tyr Val Trp Leu Ala Ile Cys Asn Gln Asn Gln Pro Ala Tyr Glu Thr 40 Xaa Pro 50 <210> 1200 <211> 49

<212> PRT

## <213> Homo sapiens

<210> 1201 <211> 46 <212> PRT <213> Homo sapiens

<210> 1202 <211> 332 <212> PRT <213> Homo sapiens

<400> 1202

Met Pro Leu Pro Trp Ser Leu Ala Leu Pro Leu Leu Ser Trp Val 10 Ala Gly Gly Phe Gly Asn Ala Ala Ser Ala Arg His His Gly Leu Leu 25 Ala Ser Ala Arg Gln Pro Gly Val Cys His Tyr Gly Thr Lys Leu Ala 40 Cys Cys Tyr Gly Trp Arg Arg Asn Ser Lys Gly Val Cys Glu Ala Thr 55 Cys Glu Pro Gly Cys Lys Phe Gly Glu Cys Val Gly Pro Asn Lys Cys 70 Arg Cys Phe Pro Gly Tyr Thr Gly Lys Thr Cys Ser Gln Asp Val Asn 85 90 Glu Cys Gly Met Lys Pro Arg Pro Cys Gln His Arg Cys Val Asn Thr 105 His Gly Ser Tyr Lys Cys Phe Cys Leu Ser Gly His Met Leu Met Pro 120 Asp Ala Thr Cys Val Asn Ser Arg Thr Cys Ala Met Ile Asn Cys Gln 130 135 140 Tyr Ser Cys Glu Asp Thr Glu Glu Gly Pro Gln Cys Leu Cys Pro Ser 150 155 Ser Gly Leu Arg Leu Ala Pro Asn Gly Arg Asp Cys Leu Asp Ile Asp

165 170 Glu Cys Ala Ser Gly Lys Val Ile Cys Pro Tyr Asn Arg Arg Cys Val 185 Asn Thr Phe Gly Ser Tyr Tyr Cys Lys Cys His Ile Gly Phe Glu Leu 200 Gln Tyr Ile Ser Gly Arg Tyr Asp Cys Ile Asp Ile Asn Glu Cys Thr 215 220 Met Asp Ser His Thr Cys Ser His His Ala Asn Cys Phe Asn Thr Gln 230 235 Gly Ser Phe Lys Cys Lys Cys Lys Gln Gly Tyr Lys Gly Asn Gly Leu 250 Arg Cys Ser Ala Ile Pro Glu Asn Ser Val Lys Glu Val Leu Arg Ala 260 265 Pro Gly Thr Ile Lys Asp Arg Ile Lys Lys Leu Leu Ala His Lys Asn 280 Ser Met Lys Lys Lys Ala Lys Ile Lys Asn Val Thr Pro Glu Pro Thr 295 300 Arg Thr Pro Thr Pro Lys Val Asn Leu Gln Pro Phe Asn Tyr Glu Glu 310 315 Ile Val Ser Arg Gly Gly Asn Ser His Gly Gly \* 325 330 331

<210> 1203 <211> 825 <212> PRT <213> Homo sapiens

<400> 1203

Met Ala Arg Leu Gly Asn Cys Ser Leu Thr Trp Ala Ala Leu Ile Ile 10 Leu Leu Pro Gly Ser Leu Glu Glu Cys Gly His Ile Ser Val Ser 20 25 Ala Pro Ile Val His Leu Gly Asp Pro Ile Thr Ala Ser Cys Ile Ile 40 Lys Gln Asn Cys Ser His Leu Asp Pro Glu Pro Gln Ile Leu Trp Arg 55 Leu Gly Ala Glu Leu Gln Pro Gly Gly Arg Gln Gln Arg Leu Ser Asp Gly Thr Gln Glu Ser Ile Ile Thr Leu Pro His Leu Asn His Thr Gln 85 90 Ala Phe Leu Ser Cys Cys Leu Asn Trp Gly Asn Ser Leu Gln Ile Leu 105 110 Asp Gln Val Glu Leu Arg Ala Gly Tyr Pro Pro Ala Ile Pro His Asn 120 Leu Ser Cys Leu Met Asn Leu Thr Thr Ser Ser Leu Ile Cys Gln Trp 135 140 Glu Pro Gly Pro Glu Thr His Leu Pro Thr Ser Phe Thr Leu Lys Ser 150 155 Phe Lys Ser Arg Gly Asn Cys Gln Thr Gln Gly Asp Ser Ile Leu Asp 170 Cys Val Pro Lys Asp Gly Gln Ser His Cys Cys Ile Pro Arg Lys His 185 Leu Leu Tyr Gln Asn Met Gly Ile Trp Val Gln Ala Glu Asn Ala 200 205 Leu Gly Thr Ser Met Ser Pro Gln Leu Cys Leu Asp Pro Met Asp Val 220

Val Lys Leu Glu Pro Pro Met Leu Arg Thr Met Asp Pro Ser Pro Glu 230 235 240 Ala Ala Pro Pro Gln Ala Gly Cys Leu Gln Leu Cys Trp Glu Pro Trp 250 Gln Pro Gly Leu His Ile Asn Gln Lys Cys Glu Leu Arg His Lys Pro 265 Gln Arg Gly Glu Ala Ser Trp Ala Leu Val Gly Pro Leu Pro Leu Glu 280 Ala Leu Gln Tyr Glu Leu Cys Gly Leu Leu Pro Ala Thr Ala Tyr Thr 295 Leu Gln Ile Arg Cys Ile Arg Trp Pro Leu Pro Gly His Trp Ser Asp 310 315 Trp Ser Pro Ser Leu Glu Leu Arg Thr Thr Glu Arg Ala Pro Thr Val 325 330 Arg Leu Asp Thr Trp Trp Arg Gln Arg Gln Leu Asp Pro Arg Thr Val 340 345 Gln Leu Phe Trp Lys Pro Val Pro Leu Glu Glu Asp Ser Gly Arg Ile 360 Gln Gly Tyr Val Val Ser Trp Arg Pro Ser Gly Gln Ala Gly Ala Ile 375 380 Leu Pro Leu Cys Asn Thr Thr Glu Leu Ser Cys Thr Phe His Leu Pro 390 395 400 Ser Glu Ala Gln Glu Val Ala Leu Val Ala Tyr Asn Ser Ala Gly Thr 405 410 Ser Arg Pro Thr Pro Val Val Phe Ser Glu Ser Arg Gly Pro Ala Leu 420 425 Thr Arg Leu His Ala Met Ala Arg Asp Pro His Ser Leu Trp Val Gly 440 Trp Glu Pro Pro Asn Pro Trp Pro Gln Gly Tyr Val Ile Glu Trp Gly 455 460 Leu Gly Pro Pro Ser Ala Ser Asn Ser Asn Lys Thr Trp Arg Met Glu 470 475 Gln Asn Gly Arg Ala Thr Gly Phe Leu Leu Lys Glu Asn Ile Arg Pro 485 490 Phe Gln Leu Tyr Glu Ile Ile Val Thr Pro Leu Tyr Gln Asp Thr Met 500 505 Gly Pro Ser Gln His Val Tyr Ala Tyr Ser Gln Glu Met Ala Pro Ser 520 525 His Ala Pro Glu Leu His Leu Lys His Ile Gly Lys Thr Trp Ala Gln 535 540 Leu Glu Trp Val Pro Glu Pro Pro Glu Leu Gly Lys Ser Pro Leu Thr 545 . 550 555 His Tyr Thr Ile Phe Trp Thr Asn Ala Gln Asn Gln Ser Phe Ser Ala 565 570 Ile Leu Asn Ala Ser Ser Arg Gly Phe Val Leu His Gly Leu Glu Pro 585 Ala Ser Leu Tyr His Ile His Leu Met Ala Ala Ser Gln Ala Gly Ala 600 605 Thr Asn Ser Thr Val Leu Thr Leu Met Thr Leu Thr Pro Ala Pro Thr 615 620 Gly Arg Ile Pro Ser Gly Gln Val Ser Gln Thr Gln Leu Thr Ala Ala 630 635 Trp Ala Pro Gly Cys Pro Gln Ser Trp Arg Arg Met Pro Ser Ser Cys 645 650 Pro Ala Leu Ala Arg His Pro Ser Pro Ser Ser Gln Cys Trp Arg Arg 660 665 Met Lys Arg Ser Arg Cys Pro Gly Ser Pro Ile Thr Ala Gln Arg Pro 680 Val Ala Ser Pro Leu Trp Ser Arg Pro Met Cys Ser Arg Gly Thr Gln

690 695 700 Glu Gln Phe Pro Pro Ser Pro Asn Pro Ser Leu Ala Pro Ala Ile Arg 710 715 720 Ser Phe Met Gly Ser Cys Trp Ala Ala Pro Gln Ala Gln Gly Gln Gly 725 730 735 Thr Ile Ser Ala Val Thr Pro Leu Ser Pro Ser Trp Arg Ala Ser Pro 740 745 750 Pro Ala Pro Ser Pro Met Arg Thr Ser Gly Ser Arg Pro Ala Pro Trp 755 760 765 Gly Pro Leu Val Thr Pro Ser Pro Lys Ser Gln Glu Asp Asp Cys Val 770 775 780 Phe Gly Pro Leu Leu Asn Phe Pro Pro Ser Cys Arg Gly Ser Gly Ser 795 790 Met Gly Trp Arg Arg Trp Gly Ala Ser Arg Ala Ser Leu Gly Phe Pro 805 810 Ser Trp Ala Cys Leu Leu Lys Ala \* 824 820

<210> 1204 <211> 48 <212> PRT

<213> Homo sapiens

<210> 1205 <211> 46 <212> PRT <213> Homo sapiens

<210> 1206 <211> 88 <212> PRT <213> Homo sapiens

<400> 1206

 Met Gln Trp Cys
 Asn Leu Thr Ala Thr Ser Ala Phe Gln Ile Glu Ala 1

 1
 5
 10
 10
 15
 15

 Ile Leu Leu Pro Gln Leu Ser Pro Val Ala Gly Ile Thr Gly Thr Cys 20
 25
 30
 30
 30

 Tyr His Ala Trp Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe His 35
 40
 45
 45

 His Val Gly Gln Ala Gly Leu Glu Leu Glu Leu Thr Ser Gly Asp Pro Pro 50
 55
 60
 60

 Thr Leu Ala Ser Gln Ser Ala Gly Ile Thr Ser Val Ser His His Ala 65
 70
 75
 80

 Gln Pro Leu Lys Gly Thr Phe \*
 87
 87

<210> 1207 <211> 186 <212> PRT <213> Homo sapiens

<400> 1207 Met Ile Leu Asn Lys Ala Leu Met Leu Gly Ala Leu Ala Leu Thr Thr 10 Val Met Ser Pro Cys Gly Gly Glu Asp Ile Val Ala Asp His Val Ala 20 25 Ser Tyr Gly Val Asn Leu Tyr Gln Ser Tyr Gly Pro Ser Gly Gln Tyr 40 Ser His Glu Phe Asp Gly Asp Glu Glu Phe Týr Val Asp Leu Glu Arg Lys Glu Thr Val Trp Gln Leu Pro Leu Phe Arg Arg Phe Arg Arg Phe 70 Asp Pro Gln Phe Ala Leu Thr Asn Ile Ala Val Leu Lys His Asn Leu 85 90 Asn Ile Val Ile Lys Arg Ser Asn Ser Thr Ala Ala Thr Asn Glu Val 105 Pro Glu Val Thr Val Phe Ser Lys Ser Pro Val Thr Leu Gly Gln Pro 120 Asn Thr Leu Ile Cys Leu Val Asp Asn Ile Phe Pro Pro Val Val Asn 130 135 140 Ile Thr Trp Leu Ser Asn Gly His Ser Val Thr Glu Gly Val Ser Glu 145 150 155 160 Thr Arg Pro Ser Ser Pro Lys Ser Asp His Phe Leu Leu Gln Asp Gln 165 170 Val Thr Ser Pro Ser Phe Pro Phe Glu \*

<210> 1208 <211> 46 <212> PRT <213> Homo sapiens

180

25 Pro Ser Ser Arg Met Trp Lys Ser Ile Ile Phe Phe Leu \* 40 <210> 1209 <211> 199 <212> PRT <213> Homo sapiens <400> 1209 Met Ala Leu Leu Val Pro Leu Ala Leu Leu Val Ile Gln Ala His Leu 5 10 Val Leu Ser Val Gln Leu Glu Arg Val Val Thr Glu Glu Lys Val Ala 25 Leu Leu Ala Leu Leu Val Leu Pro Val Leu Leu Val Pro Glu Val Leu 40 Leu Val Leu Lys Ala His Val Val Thr Lys Val Lys Gln Val Asn Val 55 60 Glu Leu Leu Ala Ser Lys Asp Ile Glu Asp Ser Leu Val Ile Gln Val 70 75 Pro Gln Val Leu Gln Ala Leu Leu Val Ser Arg Val Gln Ser Ala Val 85 90 Gln Asp Leu Gln Ala Pro Glu Asp Leu Leu Asp Pro Val Asp Leu Leu 100 105 Ala Lys Met Glu Pro Val Asp Ile Gln Val Pro Leu Asp His Gln Gly 120 125 Leu Glu Val Thr Glu Val Lys Glu Asp Leu Arg Ala Pro Gln Ala Thr 135 140 Gln Gly Asn Gln Ala Leu Leu Asp Leu Leu Val Pro Leu Val Leu Ala 155 150 Val Val Leu Glu Pro Leu Pro Leu Gly Leu Glu Val Lys Lys 165 170 175 Leu Ala Val Leu Pro Arg Ile Met Glu Met Asn Gln Trp Ile Ser Lys 185 Ser Thr Pro Met Arg Leu \* 195 198 <210> 1210 <211> 59 <212> PRT <213> Homo sapiens <400> 1210 Met Leu Val Thr Arg Pro Ser Gly Asn Thr Trp Ile Pro Phe Phe Cys

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<210> 1211
    <211> 227
    <212> PRT
    <213> Homo sapiens
    <221> misc feature
    <222> (1)...(227)
    <223> Xaa = any amino acid or nothing
    <400> 1211
Met Ala Ser Ile Cys Ser Trp Arg Val Met Leu Ala Trp Ala Ala Cys
 1 5
                                 10
Trp Val Arg Ala His Ala Ala Leu Ser Gly His Pro Arg Ser Thr Phe
                             25
Ser Leu Trp Leu Ser Gly Ile Ser Leu Pro Xaa Pro Ile Phe Leu Pro
                          40
                               45
Met Ala Val Ser Leu Leu Thr Pro Lys Asp Val Lys Tyr Ala Arg Ser
                      55
Pro Asn Cys Phe Lys Ala Ala Leu Asn Ile Pro Asp Pro Gly Ala Val
                  70
His Leu Ile Ile Ala Leu Leu Thr Asp Gly Ala Ile Pro Leu Leu
              85 . 90
Gln Pro Ala Arg Val Lys Lys Ser Asn Ala His Val Phe Leu His Phe
                  105
Ala Gly Gly Asp Leu Leu Pro Ser Asn Gly Gly His Lys Ile Leu Ile
                        120
                                           125
Trp Ser Arg Gly Trp Arg Gln Gly Leu Gly Gly Phe Gly Ile Ile Ile
                     135
                                        140
Leu Ala Asp Asn Asp Leu Val Trp Ser Trp Gly Gln Ser Trp Arg His
                 150
                                    155
Gly Cys Leu Leu Gly Val Gly Ala Leu Ser Ala Leu Leu Leu His His
             165
                                170
Leu Asn Pro His Pro Tyr Leu Val Leu Gly Cys Pro Gly Pro Ala Gly
        180
                            185
                                      190
Lys Glu Ala Pro Pro Pro Ser Pro Val Cys His Pro Pro His Gln Thr
                     200
                                  205
Arg Pro Pro Ser Gln Leu Pro His Ser Pro Gln Thr Phe His Ser Ala
  210
Pro Glu *
225 226
    <210> 1212
    <211> 62
    <212> PRT
    <213> Homo sapiens
    <400> 1212
Met Cys Val Ser Val Arg Val Cys Val Cys Val Cys Ala Arg
                                 10
Val Cys Ala Arg Leu Cys Val Cys Val His Ala Arg Leu Cys Val His
                              25
        20
Val Arg Val Ser Ala Arg Val Ser Val Tyr Val Cys Thr Arg Val Ser
```

Val Cys Val His Ala Arg Ala Arg His His Arg Ser Ile \*

50 55 60 61

<210> 1213 <211> 55

<212> PRT

<213> Homo sapiens

<400> 1213

<210> 1214

<211> 642

<212> PRT

<213> Homo sapiens

<400> 1214

Met Thr Met Tyr Leu Trp Leu Lys Leu Leu Ala Phe Gly Phe Ala Phe 5 10 Leu Asp Thr Glu Val Phe Val Thr Gly Gln Ser Pro Thr Pro Ser Pro 25 Thr Asp Ala Tyr Leu Asn Ala Ser Glu Thr Thr Thr Leu Ser Pro Ser Gly Ser Ala Val Ile Ser Thr Thr Thr Ile Ala Thr Thr Pro Ser Lys 55 Pro Thr Cys Asp Glu Lys Tyr Ala Asn Ile Thr Val Asp Tyr Leu Tyr 70 75 Asn Lys Glu Thr Lys Leu Phe Thr Ala Lys Leu Asn Val Asn Glu Asn 85 90 Val Glu Cys Gly Asn Asn Thr Cys Thr Asn Asn Glu Val His Asn Leu 100 105 Thr Glu Cys Lys Asn Ala Ser Val Ser Ile Ser His Asn Ser Cys Thr 115 120 Ala Pro Asp Lys Thr Leu Ile Leu Asp Val Pro Pro Gly Val Glu Lys 130 135 Phe Gln Leu His Asp Cys Thr Gln Val Glu Lys Ala Asp Thr Thr Ile 145 150 155 160 Cys Leu Lys Trp Lys Asn Ile Glu Thr Phe Thr Cys Asp Thr Gln Asn 165 170 Ile Thr Tyr Arg Phe Gln Cys Gly Asn Met Ile Phe Asp Asn Lys Glu 185 Ile Lys Leu Glu Asn Leu Glu Pro Glu His Glu Tyr Lys Cys Asp Ser 195 200 Glu Ile Leu Tyr Asn Asn His Lys Phe Thr Asn Ala Ser Lys Ile Ile 215 220 Lys Thr Asp Phe Gly Ser Pro Gly Glu Pro Gln Ile Ile Phe Cys Arg 230 235

```
Ser Glu Ala Ala His Gln Gly Val Ile Thr Trp Asn Pro Pro Gln Arg
             245
                         250 255
Ser Phe His Asn Phe Thr Leu Cys Tyr Ile Lys Glu Thr Glu Lys Asp
                           265
Cys Leu Asn Leu Asp Lys Asn Leu Ile Lys Tyr Asp Leu Gln Asn Leu
Lys Pro Tyr Thr Lys Tyr Val Leu Ser Leu His Ala Tyr Ile Ile Ala
                     295
Lys Val Gln Arg Asn Gly Ser Ala Ala Met Cys His Phe Thr Thr Lys
                         315
              310
Ser Ala Pro Pro Ser Gln Val Trp Asn Met Thr Val Ser Met Thr Ser
                                330 . 335
              325
Asp Asn Ser Met His Val Lys Cys Arg Pro Pro Arg Asp Arg Asn Gly
                           345
Pro His Glu Arg Tyr His Leu Glu Val Glu Ala Gly Asn Thr Leu Val
                         360
Arg Asn Glu Ser His Lys Asn Cys Asp Phe Arg Val Lys Asp Leu Gln
                     375
                                       380
Tyr Ser Thr Asp Tyr Thr Phe Lys Ala Tyr Phe His Asn Gly Asp Tyr
                390
                                   395
Pro Gly Glu Pro Phe Ile Leu His His Ser Thr Ser Tyr Asn Ser Lys
                               410
Ala Leu Ile Ala Phe Leu Ala Phe Leu Ile Ile Val Thr Ser Ile Ala
                           425
Leu Leu Val Val Leu Tyr Lys Ile Tyr Asp Leu His Lys Lys Arg Ser
                        440
Cys Asn Leu Asp Glu Gln Glu Leu Val Glu Arg Asp Asp Glu Lys
        455
                                      460
Gln Leu Met Asn Val Glu Pro Ile His Ala Asp Ile Leu Leu Glu Thr
       470
                                  475
Tyr Lys Arg Lys Ile Ala Asp Glu Gly Arg Leu Phe Leu Ala Glu Phe
                               490
Gln Ser Ile Pro Arg Val Phe Ser Lys Phe Pro Ile Lys Glu Ala Arg
         500
                            505
Lys Pro Phe Asn Gln Asn Lys Asn Arg Tyr Val Asp Ile Leu Pro Tyr
                       520
                                          525
Asp Tyr Asn Arg Val Glu Leu Ser Glu Ile Asn Gly Asp Ala Gly Ser
         535
                                     540
Asn Tyr Ile Asn Ala Ser Tyr Ile Asp Gly Phe Lys Glu Pro Arg Lys
                550
                                  555
Tyr Ile Ala Ala Gln Gly Pro Arg Asp Glu Thr Val Asp Asp Phe Trp
             565
                              570
Arg Met Ile Trp Glu Gln Lys Ala Thr Val Ile Val Met Val Thr Arg
         580 585
Cys Glu Glu Gly Asn Arg Asn Lys Cys Ala Glu Tyr Trp Pro Ser Met
                                605
                       600
Glu Glu Gly Thr Arg Ala Phe Gly Glu Cys Cys Cys Lys Asp Leu Thr
                  615
                                     620
Lys His Lys Arg Cys Pro Arg Leu His His Ser Glu Ile Glu His Cys
Lys
641
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<sup>&</sup>lt;210> 1215 <211> 85 <212> PRT

<sup>&</sup>lt;213> Homo sapiens

<210> 1216 <211> 403 <212> PRT <213> Homo sapiens

<400> 1216 Met Ala Ser Val Val Leu Pro Ser Gly Ser Gln Cys Ala Ala Ala Ala 5 10 Ala Ala Ala Pro Pro Gly Leu Arg Leu Arg Leu Leu Leu Leu 25 Phe Ser Ala Ala Ala Leu Ile Pro Thr Gly Asp Gly Gln Asn Leu Phe 40 Thr Lys Asp Val Thr Val Ile Glu Gly Glu Val Ala Thr Ile Ser Cys 55 Gln Val Asn Lys Ser Asp Asp Ser Val Ile Gln Leu Leu Asn Pro Asn 70 75 Arg Gln Thr Ile Tyr Phe Arg Asp Phe Arg Pro Leu Lys Asp Ser Arg 85 90 Phe Gln Leu Leu Asn Phe Ser Ser Ser Glu Leu Lys Val Ser Leu Thr 105 Asn Val Ser Ile Ser Asp Glu Gly Arg Tyr Phe Cys Gln Leu Tyr Thr 120 Asp Pro Pro Gln Glu Ser Tyr Thr Thr Ile Thr Val Leu Val Pro Pro 130 135 140 Arg Asn Leu Met Ile Asp Ile Gln Lys Asp Thr Ala Val Glu Gly Glu 150 155 Glu Ile Glu Val Asn Cys Thr Ala Met Ala Ser Lys Pro Ala Thr Thr 170 175 Ile Arg Trp Phe Lys Gly Asn Thr Glu Leu Lys Gly Lys Ser Glu Val 185 Glu Glu Trp Ser Asp Met Tyr Thr Val Thr Ser Gln Leu Met Leu Lys 200 Val His Lys Glu Asp Asp Gly Val Pro Val Ile Cys Gln Val Glu His 215 Pro Ala Val Thr Gly Asn Leu Gln Thr Gln Arg Tyr Leu Glu Val Gln 230 235 Tyr Lys Pro Gln Val His Ile Gln Met Thr Tyr Pro Leu Gln Gly Leu 245 250 Thr Arg Glu Gly Asp Ala Leu Glu Leu Thr Cys Glu Ala Ile Gly Lys 265

Pro Gln Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met Pro 280 Gln His Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn Leu Asn 295 Lys Thr Asp Asn Gly Thr Tyr Arg Cys Glu Ala Ser Asn Ile Val Gly 310 315 Lys Ala His Ser Asp Tyr Met Leu Tyr Val Tyr Asp Pro Pro Thr Thr 325 330 340 345 Thr Ile Leu Thr Ile Ile Thr Asp Ser Arg Ala Gly Glu Glu Ser 360 Ile Arg Ala Val Asp His Ala Val Ile Gly Gly Val Val Ala Val Val 375 380 Val Phe Ala Met Leu Cys Leu Leu Ile Ile Leu Gly Arg Tyr Phe Ala 390 Gln Thr \* 402

<210> 1217 <211> 49 <212> PRT

<213> Homo sapiens

<210> 1218 <211> 304 <212> PRT <213> Homo sapiens

<400> 1218 Met Ala Arg Arg Ser Arg His Arg Leu Leu Leu Leu Leu Arg Tyr 5 Leu Val Val Ala Leu Gly Tyr His Lys Ala Tyr Gly Phe Ser Ala Pro 25 Lys Asp Gln Gln Val Val Thr Ala Val Glu Tyr Gln Glu Ala Ile Leu 35 40 Ala Cys Lys Thr Pro Lys Lys Thr Val Ser Ser Arg Leu Glu Trp Lys 55 60 Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr Gln Gln Thr Leu Gln 70 75 Gly Asp Phe Lys Asn Arg Ala Glu Met Ile Asp Phe Asn Ile Arg Ile 85 90 Lys Asn Val Thr Arg Ser Asp Ala Gly Lys Tyr Arg Cys Glu Val Ser

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105
Ala Pro Ser Glu Gln Gly Gln Asn Leu Glu Glu Asp Thr Val Thr Leu
                                 125
                        120
Glu Val Leu Gly Asp Val His Val Leu Ala Pro Ala Val Pro Ser Cys
                    135
                                      140
Glu Val Pro Ser Ser Ala Leu Ser Gly Thr Val Val Glu Leu Arg Cys
                150
                                  155
Gln Asp Lys Glu Gly Asn Pro Ala Pro Glu Tyr Thr Trp Phe Lys Asp
                   170
             165
Gly Ile Arg Leu Leu Glu Asn Pro Arg Leu Gly Ser Gln Ser Thr Asn
          180
                          185
Ser Ser Tyr Thr Met Asn Thr Lys Thr Gly Thr Leu Gln Phe Asn Thr
                       200
                                          205
Val Ser Lys Leu Asp Thr Gly Glu Tyr Ser Cys Glu Ala Arg Asn Ser
                    215
                                      220
Val Gly Tyr Arg Arg Cys Pro Gly Lys Arg Met Gln Val Asp Asp Leu ~
                230
                                  235
Asn Ile Ser Gly Ile Ile Ala Ala Val Val Val Ala Leu Val Ile
 . 245
                              250
Ser Val Cys Gly Leu Gly Val Cys Tyr Ala Gln Arg Lys Gly Tyr Phe
         260
                         265
Ser Lys Glu Thr Ser Phe Gln Lys Ser Asn Ser Ser Ser Lys Ala Thr
   275 280
Thr Met Ser Glu Asn Asp Phe Lys His Thr Lys Ser Phe Ile Ile *
                   295
                                      300 303
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<210> 1219

<211> 1126

<212> PRT

<213> Homo sapiens

<400> 1219

Met Trp Phe Leu Phe Leu Cys Pro Asn Leu Trp Ala Met Pro Val Gln Ile Ile Met Gly Val Ile Leu Leu Tyr Asn Leu Leu Gly Ser Ser Ala 25 20 Leu Val Gly Ala Ala Val Ile Val Leu Leu Ala Pro Ile Gln Tyr Phe 35 40 Ile Ala Thr Lys Leu Ala Glu Ala Gln Lys Ser Thr Leu Asp Tyr Ser 55 60 Thr Glu Arg Leu Lys Lys Thr Asn Glu Ile Leu Lys Gly Ile Lys Leu 75 Leu Lys Leu Tyr Ala Trp Glu His Ile Phe Cys Lys Ser Val Glu Glu 85 Thr Arg Met Lys Glu Leu Ser Ser Leu Lys Thr Phe Ala Leu Tyr Thr 100 105 Ser Leu Ser Ile Phe Met Asn Ala Ala Ile Pro Ile Ala Ala Val Leu 120 Ala Thr Phe Val Thr His Ala Tyr Ala Ser Gly Asn Asn Leu Lys Pro 135 140 Ala Glu Ala Phe Ala Ser Leu Ser Leu Phe His Ile Leu Val Thr Pro 150 155 Leu Phe Leu Leu Ser Thr Val Val Arg Phe Ala Val Lys Ala Ile Ile 165 170 Ser Val Gln Lys Leu Asn Glu Phe Leu Leu Ser Asp Glu Ile Gly Asp 180 185

```
Asp Ser Trp Arg Thr Gly Glu Ser Ser Leu Pro Phe Glu Ser Cys Lys
       195
                          200
Lys His Thr Gly Val Gln Pro Lys Thr Ile Asn Arq Lys Gln Pro Gly
                      215
                                      220
Arg Tyr His Leu Asp Ser Tyr Glu Gln Ser Thr Arg Arg Leu Arg Pro
                  230
                           235
Ala Glu Thr Glu Asp Ile Ala Ile Lys Val Thr Asn Gly Tyr Phe Ser
               245
                                 250
Trp Gly Ser Gly Leu Ala Thr Leu Ser Asn Ile Asp Ile Arg Ile Pro
                              265
Thr Gly Gln Leu Thr Met Ile Val Gly Gln Val Gly Cys Gly Lys Ser
                                             285
Ser Leu Leu Leu Ala Ile Leu Gly Glu Met Gln Thr Leu Glu Gly Lys
                       295
Val His Trp Ser Asn Val Asn Glu Ser Glu Pro Ser Phe Glu Ala Thr
                   310
                                     315
Arg Ser Arg Asn Arg Tyr Ser Val Ala Tyr Ala Ala Gln Lys Pro Trp
               325
                                  330
Leu Leu Asn Ala Thr Val Glu Glu Asn Ile Thr Phe Gly Ser Pro Phe
                              345
Asn Lys Gln Arg Tyr Lys Ala Val Thr Asp Ala Cys Ser Leu Gln Pro
                          360
Asp Ile Asp Leu Leu Pro Phe Gly Asp Gln Thr Glu Ile Gly Glu Arg
                      375
                                         380
Gly Ile Asn Leu Ser Gly Gly Gln Arg Gln Arg Ile Cys Val Ala Arg
        390
                                     395
Ala Leu Tyr Gln Asn Thr Asn Ile Val Phe Leu Asp Asp Pro Phe Ser
              405
                                 410
Ala Leu Asp Ile His Leu Ser Asp His Leu Met Gln Glu Gly Ile Leu
          420
                             425
Lys Phe Leu Gln Asp Asp Lys Arg Thr Leu Val Leu Val Thr His Lys
                          440
                                             445
Leu Gln Tyr Leu Thr His Ala Asp Trp Ile Ile Ala Met Lys Asp Gly
                      455
                                         460
Ser Val Leu Arg Glu Gly Thr Leu Lys Asp Ile Gln Thr Lys Asp Val
                 470
                                     475
Glu Leu Tyr Glu His Trp Lys Thr Leu Met Asn Arg Gln Asp Gln Glu
              485
                                 490
Leu Glu Lys Asp Met Glu Ala Asp Gln Thr Thr Leu Glu Arg Lys Thr
                             505
Leu Arg Arg Ala Met Tyr Ser Arg Glu Ala Lys Ala Gln Met Glu Asp
                         520
Glu Asp Glu Glu Glu Glu Glu Glu Asp Glu Asp Asp Asn Met Ser
           535
                                        540
Thr Val Met Arg Leu Arg Thr Lys Met Pro Trp Lys Thr Cys Trp Arg
                550
                          555
Tyr Leu Thr Ser Gly Gly Phe Phe Leu Leu Ile Leu Met Ile Phe Ser
               565
                                 570
Lys Leu Leu Lys His Ser Val Ile Val Ala Ile Asp Tyr Trp Leu Ala
                              585
Thr Trp Thr Ser Glu Tyr Ser Ile Asn Asn Thr Gly Lys Ala Asp Gln
                          600
                                             605
Thr Tyr Tyr Val Ala Gly Phe Ser Ile Leu Cys Gly Ala Gly Ile Phe
                       615
                                         620
Leu Cys Leu Val Thr Ser Leu Thr Val Glu Trp Met Gly Leu Thr Ala
                 630
                                     635
Ala Lys Asn Leu His His Asn Leu Leu Asn Lys Ile Ile Leu Gly Pro
               645
                                 650
Ile Arg Phe Phe Asp Thr Thr Pro Leu Gly Leu Ile Leu Asn Arg Phe
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			660					665					670		
Ser	Ala	Asp 675	Thr	Asn	Ile	Ile	Asp 680	Gln	His	Ile	Pro	Pro 685		Leu	Glu
Ser	Leu 690	Thr	Arg	Ser	Thr	Leu 695	Leu	Cys	Leu	Ser	Ala 700		Gly	Met	Ile
705					710				Ala	715					720
Ala	Phe	Tyr	Phe	Ile 725	Gln	Lys	Tyr	Phe	Arg 730	Val	Ala	Ser	Lys	Asp 735	Leu
			740					745					750		
		755					760		Arg			765			
	770					775			Thr		780				
785					790				Trp	795					800
				805					Ala 810					815	
			820					825	Leu				830		
		835					840		Val			845			
	850					855			Val		860				
865	ser	GIU	ASII	TYE	870	GTA	rnr	Met	Asp	Pro 875	Ser	GIn	Val	Pro	Glu 880
His	Trp	Pro	Gln	Glu 885		Glu	Ile	Lys	Ile 890		Asp	Leu	Суѕ	Val 895	Arg
			900					905	Lys				910	Tyr	
		915					920		Gly			925			
	930					935			Met		940			_	_
945					950				Ser	955					960
				965					Gln 970					975	
			980					985	Glu				990		_
		995				3	1000		Gln		1	.005			_
1	1010				1	.015			Val	1	1020	_	_		
1025	Ser	var	Gry		1030	GIII	ьец	Pne	Cys	ьец 1035	Ala	Arg	Ата		vaı .040
Arg	Lys	Ser				Ile	Met		Glu L050		Thr	Ala			
		1	.060				1	.065	Val			1	1070		
	1	L075				1	.080		Arg		1	.085			_
1	1090				1	.095			Gly	1	100			=	_
1105				1	.110	Ala	His	Lys	Asn 1	Gly .115	Pro	Phe	Ser		Leu 120
val	Met	Thr		Lys .125	*										

<210> 1220 <211> 46 <212> PRT <213> Homo sapiens

<210> 1221 <211> 56 <212> PRT <213> Homo sapiens

<210> 1222 <211> 253 <212> PRT <213> Homo sapiens

<400> 1222 Met Gly Cys Ala Ile Ile Ala Gly Phe Leu His Tyr Leu Phe Leu Ala 5 10 Cys Phe Phe Trp Met Leu Val Glu Ala Val Ile Leu Phe Leu Met Val 20 25 Arg Asn Leu Lys Val Val Asn Tyr Phe Ser Ser Arg Asn Ile Lys Met 40 Leu His Ile Cys Ala Phe Gly Tyr Gly Leu Pro Met Leu Val Val Val Ile Ser Ala Ser Val Gln Pro Gln Gly Tyr Gly Met His Asn Arg Cys 70 75 Trp Leu Asn Thr Glu Thr Gly Phe Ile Trp Ser Phe Leu Gly Pro Val 85 90 Cys Thr Val Ile Val Ile Asn Ser Leu Leu Thr Trp Thr Leu Trp 105 Ile Leu Arg Gln Arg Leu Ser Ser Val Asn Ala Glu Val Ser Thr Leu

115 120 125 Lys Asp Thr Arg Leu Leu Thr Phe Lys Ala Phe Ala Gln Leu Phe Ile 135 140 Leu Gly Cys Ser Trp Val Leu Gly Ile Phe Gln Ile Gly Pro Val Ala 150 155 Gly Val Met Ala Tyr Leu Phe His His His Gln Gln Pro Ala Gly Gly 165 170 Leu His Leu Pro His Pro Leu Ser Ala Gln Arg Pro Gly Thr Arg Arg 185 Ile Gln Glu Val Asp His Trp Glu Asp Glu Ala Gln Leu Pro Val Pro 200 Asp Leu Lys Asp Leu Ala Val Leu His Ala Ile Arg Phe Gln Asp Gly 215 220 Leu Lys Ser Phe Leu Ala Phe Lys Tyr Ala Met Glu Pro Thr Val Gly 230 235 Gly Thr Ser Ser Phe Pro Cys Arg Glu Pro Tyr Pro \* 250 252

<210> 1223 <211> 858 <212> PRT

<213> Homo sapiens

<400> 1223 Met Lys Met Leu Thr Arg Leu Gln Val Leu Thr Leu Ala Leu Phe Ser 10 Lys Gly Phe Leu Leu Ser Leu Gly Asp His Asn Phe Leu Arg Arg Glu Ile Lys Ile Glu Gly Asp Leu Val Leu Gly Gly Leu Phe Pro Ile Asn 40 Glu Lys Gly Thr Gly Thr Glu Glu Cys Gly Arg Ile Asn Glu Asp Arg 55 Gly Ile Gln Arg Leu Glu Ala Met Leu Phe Ala Ile Asp Glu Ile Asn Lys Asp Asp Tyr Leu Leu Pro Gly Val Lys Leu Gly Val His Ile Leu 85 Asp Thr Cys Ser Arg Asp Thr Tyr Ala Leu Glu Gln Ser Leu Glu Phe 100 105 110 Val Arg Ala Ser Leu Thr Lys Val Asp Glu Ala Glu Tyr Met Cys Pro 120 125 Asp Gly Ser Tyr Ala Ile Gln Glu Asn Ile Pro Leu Leu Ile Ala Gly 135 140 Val Ile Gly Gly Ser Tyr Ser Arg Val Ser Ile Gln Gly Ala Asn Leu 150 155 Leu Arg Leu Phe Gln Ile Pro Gln Ile Arg Tyr Ala Ser Thr Ser Ala 170 Lys Leu Ser Asp Lys Ser Arg Tyr Asp Tyr Phe Ala Arg Thr Val Pro 185 Pro Asp Phe Tyr Gln Ala Lys Ala Met Ala Glu Ile Leu Arg Phe Phe 200 Asn Trp Thr Tyr Val Ser Thr Val Ala Ser Glu Gly Asp Tyr Gly Glu 215 220 Thr Gly Ile Glu Ala Phe Glu Gln Glu Ala Arg Leu Arg Asn Ile Cys 230 235 Ile Ala Thr Ala Glu Lys Val Gly Arg Ser Asn Ile Arg Lys Ser Tyr 250

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Asp Ser Val Ile Arg. Glu Leu Leu Gln Lys Pro Asn Ala Arg Val Val
           260
                   265 270
Val Leu Phe Met Arg Ser Asp Asp Ser Arg Glu Leu Ile Ala Ala Ala
                          280
Ser Arg Ala Asn Ala Ser Phe Thr Trp Val Ala Ser Asp Gly Trp Gly
                      295
                                         300
Ala Gln Glu Ser Ile Ile Lys Gly Ser Glu His Val Ala Tyr Gly Ala
                  310
                                     315
Ile Thr Leu Glu Leu Ala Ser Gln Pro Val Arg Gln Phe Asp Arg Tyr
                                 330
Phe Gln Ser Leu Asn Pro Tyr Asn Asn His Arg Asn Pro Trp Phe Arg
                              345
Asp Phe Trp Glu Gln Lys Phe Gln Cys Ser Leu Gln Asn Lys Arg Asn
His Arg Arg Val Cys Asp Lys His Leu Ala Ile Asp Ser Ser Asn Tyr
                      375
Glu Gln Glu Ser Lys Ile Met Phe Val Val Asn Ala Val Tyr Ala Met
                  390
                                     395
Ala His Ala Leu His Lys Met Gln Arg Thr Leu Cys Pro Asn Thr Thr
                                  410
Lys Leu Cys Asp Ala Met Lys Ile Leu Asp Gly Lys Lys Leu Tyr Lys
                              425
Asp Tyr Leu Leu Lys Ile Asn Phe Thr Ala Pro Phe Asn Pro Asn Lys
                         440
Asp Ala Asp Ser Ile Val Lys Phe Asp Thr Phe Gly Asp Gly Met Gly
                     455
                                        460
Arg Tyr Asn Val Phe Asn Phe Gln Asn Val Gly Gly Lys Tyr Ser Tyr
        470
                           475
Leu Lys Val Gly His Trp Ala Glu Thr Leu Ser Leu Asp Val Asn Ser
              485
                        490
Ile His Trp Ser Arg Asn Ser Val Pro Thr Ser Gln Cys Ser Asp Pro
                             505
Cys Ala Pro Asn Glu Met Lys Asn Met Gln Pro Gly Asp Val Cys Cys
                          520
Trp Ile Cys Ile Pro Cys Glu Pro Tyr Glu Tyr Leu Ala Asp Glu Phe
                      535
                                         540
Thr Cys Met Asp Cys Gly Ser Gly Gln Trp Pro Thr Ala Asp Leu Thr
                                     555
                 550
Gly Cys Tyr Asp Leu Pro Glu Asp Tyr Ile Arg Trp Glu Asp Ala Trp
              565
                                 570
Ala Ile Gly Pro Val Thr Ile Ala Cys Leu Gly Phe Met Cys Thr Cys
                             585
Met Val Val Thr Val Phe Ile Lys His Asn Asn Thr Pro Leu Val Lys
                         600
                                            605
Ala Ser Gly Arg Glu Leu Cys Tyr Ile Leu Leu Phe Gly Val Gly Leu
  610 . 615
                                        620
Ser Tyr Cys Met Thr Phe Phe Phe Ile Ala Lys Pro Ser Pro Val Ile
                  630
                          635
Cys Ala Leu Arg Arg Leu Gly Leu Gly Ser Ser Phe Ala Ile Cys Tyr
                                  650
Ser Ala Leu Leu Thr Lys Thr Asn Cys Ile Ala Arg Ile Phe Asp Gly
                             665
Val Lys Asn Gly Ala Gln Arg Pro Lys Phe Ile Ser Pro Ser Ser Gln
                          680
Val Phe Ile Cys Leu Gly Leu Ile Leu Val Gln Ile Val Met Val Ser
                      695
                                         700
Val Trp Leu Ile Leu Glu Ala Pro Gly Thr Arg Arg Tyr Thr Leu Ala
                  710
                                     715
Glu Lys Arg Glu Thr Val Ile Leu Lys Cys Asn Val Lys Asp Ser Ser
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725 730 Met Leu Ile Ser Leu Thr Tyr Asp Val Ile Leu Val Ile Leu Cys Thr 740 745 Val Tyr Ala Phe Lys Thr Arg Lys Cys Pro Glu Asn Phe Asn Glu Ala 760 Lys Phe Ile Gly Phe Thr Met Tyr Thr Thr Cys Ile Ile Trp Leu Ala 775 Phe Leu Pro Ile Phe Tyr Val Thr Ser Ser Asp Tyr Arg Val Gln Thr 790 795 Thr Thr Met Cys Ile Ser Val Ser Leu Ser Gly Phe Val Val Leu Gly 805 810 Cys Leu Phe Ala Pro Lys Val His Ile Ile Leu Phe Gln Pro Gln Lys 820 825 Asn Val Val Thr His Arg Leu His Leu Asn Arg Phe Ser Val Ser Gly 835 840 Thr Gly Thr His Ile Leu Ser Val Leu \* 855 857

<210> 1224 <211> 69 <212> PRT

<213> Homo sapiens

<210> 1225 <211> 55 <212> PRT <213> Homo sapiens

<210> 1226

<211> 51 <212> PRT <213> Homo sapiens <400> 1226 Met Ile Leu Ser Leu Leu Lys Phe Phe Pro Leu Leu Ser Ser Asp Thr 10 15 1 5 Pro Asn Ser Ser Val Pro Leu Leu Thr Thr Pro Arg Asp Pro Pro Tyr 20 25 His Leu Ser Pro Cys Ser Ser Ser Tyr Phe Val Lys Glu Gly Phe Ser 40 Val Val \* 50 <210> 1227 <211> 47 <212> PRT <213> Homo sapiens <400> 1227 Met Ile Leu Phe Cys Val Met Val Phe Ile Leu Phe Ile Thr Phe His 1 5 10 Leu Gln Leu Pro Thr Val Gly Asp Val Thr Tyr Cys Phe Cys Ser Asn 25 Lys Leu Arg Lys Thr Arg Glu Leu Lys Lys Ile Ser Ser Asn \* 35 40 <210> 1228 <211> 60 <212> PRT <213> Homo sapiens <400> 1228 Met Phe Ser Thr Ala Phe Trp Pro Pro Phe Leu Asn Pro Ser Leu Met 10 Phe Phe Thr Leu Leu Cys Ser Asp Phe Met Pro Cys Glu Ala Val Cys 20 25 Ser Ser Ile Ile Tyr Ser Phe Ile Pro Val Thr Lys Thr Gln Gly Ala 40 Ala Pro His Thr Arg Gly Pro Gln Pro His Thr \* 50 55 <210> 1229 <211> 52 <212> PRT <213> Homo sapiens

<400> 1229
Met Cys Glu Ser Thr Glu Leu Asn Met Thr Phe His Leu Phe Ile Val

1 5 10 15
Ala Leu Ala Gly Ala Gly Ala Ala Val Ile Ala Met Val His Tyr Leu
20 25 30
Met Val Leu Ser Ala Asn Trp Ala Tyr Val Lys Asp Ala Cys Arg Met
35 40 45
Ala Glu Val \*
50 51

<210> 1230 <211> 362 <212> PRT <213> Homo sapiens

<400> 1230

Met Pro Val Ile Trp Ser Ala Leu Ser Ala Val Leu Leu Leu Ala Ser 1.0 Ser Tyr Phe Val Gly Ala Leu Ile Val His Ala Asp Cys Phe Leu Met 25 Arg Asn His Thr Ile Thr Glu Gln Pro Met Cys Phe Gln Arg Thr Thr 40 Pro Leu Ile Leu Gln Glu Val Ala Ser Phe Leu Lys Arg Asn Lys His 55 Gly Pro Phe Leu Leu Phe Val Ser Phe Leu His Val His Ile Pro Leu 70 75 Ile Thr Met Glu Asn Phe Leu Gly Lys Ser Leu His Gly Leu Tyr Gly 85 90 Asp Asn Val Lys Glu Met Asp Trp Met Val Gly Arg Ile Leu Asp Thr 105 Leu Asp Val Glu Gly Leu Ser Asn Ser Thr Leu Ile Tyr Phe Thr Ser 120 125 Asp His Gly Gly Ser Leu Glu Asn Gln Leu Gly Asn Thr Gln Tyr Gly 135 140 Gly Trp Asn Gly Ile Tyr Lys Gly Gly Lys Gly Met Gly Gly Trp Glu 150 155 Gly Gly Ile Arg Val Pro Gly Ile Phe Arg Trp Pro Gly Val Leu Pro 165 170 Ala Gly Arg Val Ile Gly Glu Pro Thr Ser Leu Met Asp Val Phe Pro 185 Thr Val Val Arg Leu Ala Gly Ser Glu Val Pro Gln Asp Arg Val Ile 200 Asp Gly Gln Asp Leu Leu Pro Leu Leu Leu Gly Thr Ala Gln His Ser 215 220 Asp His Glu Phe Leu Met His Tyr Cys Glu Arg Phe Leu His Ala Ala 230 235 Arg Trp His Gln Arg Asp Arg Gly Thr Met Trp Lys Val His Phe Val 250 Thr Pro Val Phe Gln Pro Arg Gly Ser Arg Cys Leu Leu Trp Lys Glu 265 Lys Val Cys Pro Cys Phe Gly Glu Lys Ser Ser Pro Pro Arg Ser His 275 280 Pro Cys Phe Phe Asp Leu Ser Arg Ala Pro Ser Glu Thr His Ile Leu 295 300 Thr Pro Ala Ser Glu Pro Val Phe Tyr Gln Val Met Glu Arg Ser Pro 310 315 Ala Gly Gly Val Gly Thr Pro Ala Asp Thr Gln Pro Ser Ser Ala 325 330

<210> 1231 <211> 53 <212> PRT <213> Homo sapiens

<210> 1232 <211> 56 <212> PRT <213> Homo sapiens

<210> 1233 <211> 56 <212> PRT <213> Homo sapiens

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<210> 1234
<211> 125
<212> PRT
<213> Homo sapiens
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<400> 1234 Met Leu Ser Gln Leu Pro Arg Cys Gln Ser Ser Val Pro Ala Leu Ala 5 10 His Pro Thr Arg Leu His Tyr Leu Leu Arg Leu Leu Thr Phe Leu Leu 20 25 Gly Pro Gly Ala Gly Gly Ala Glu Ala Gln Gly Met Leu Gly Arg Ala 40 Leu Leu Ser Ser Leu Pro Asp Asn Cys Ser Phe Trp Asp Ala Phe 55 60 Arg Pro Glu Gly Arg Arg Ser Val Leu Arg Thr Ile Gly Glu Tyr Leu 70 75 Glu Gln Asp Glu Glu Gln Pro Thr Pro Ser Gly Phe Glu Pro Thr Val 85 90 Asn Pro Ser Ser Gly Ile Ser Lys Met Glu Leu Leu Ala Cys Phe Ser 105 Val Ser Ala Leu Pro Glu Gly Lys Leu Leu Glu Gln \* 120

<210> 1235 <211> 72 <212> PRT <213> Homo sapiens

<210> 1236 <211> 48 <212> PRT <213> Homo sapiens

Arg Ala Gly Gly Leu Gly Phe Thr His Cys Gln Ala Asn Ser Thr Thr 35 40 45 48

<210> 1237 <211> 208 <212> PRT

<213> Homo sapiens

<400> 1237 Met Ala Phe Leu Arg Lys Val Tyr Ser Ile Leu Ser Leu Gln Val Leu 1 5 10 Leu Thr Thr Val Thr Ser Thr Val Phe Leu Tyr Phe Glu Ser Val Arg 25 Thr Phe Val His Glu Ser Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly 40 Ser Leu Gly Leu Ile Phe Ala Leu Ile Leu Asn Arg His Lys Tyr Pro 55 Leu Asn Leu Tyr Leu Leu Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr 70 75 Val Ala Val Val Thr Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala 85 90 Phe Ile Leu Thr Thr Thr Val Phe Phe Gly Leu Thr Val Tyr Thr Leu 100 105 110 Gln Ser Lys Lys Asp Phe Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu 120 Leu Trp Ile Leu Cys Leu Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser 135 140 Glu Ile Met Glu Leu Val Leu Ala Ala Ala Gly Ala Leu Leu Phe Cys 150 155 Gly Phe Ile Ile Tyr Asp Thr His Ser Leu Met His Lys Leu Ser Pro 170 Glu Glu Tyr Val Leu Ala Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn 180 185 Leu Phe Leu His Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys \* 200 205 207

<210> 1238 <211> 173 <212> PRT <213> Homo sapiens

65 70 75 Asn Phe Gly Phe Ser Leu Leu Arg Lys Ile Ser Met Arg His Asp Gly 85 90 Asn Met Val Phe Ser Pro Phe Gly Met Ser Leu Ala Met Thr Gly Leu 100 105 Met Leu Gly Ala Thr Gly Pro Thr Glu Thr Gln Ile Lys Arg Gly Leu 125 120 His Leu Gln Ala Leu Lys Pro Thr Lys Pro Gly Leu Leu Pro Ser Leu 140 135 Phe Lys Gly Leu Arg Glu Thr Leu Ser Arg Asn Leu Glu Leu Gly Leu 150 155 Thr Ala Gly Glu Phe Cys Leu His Pro Gln Gly Phe \* 165 170 172

<210> 1239 <211> 357 <212> PRT <213> Homo sapiens

<400> 1239 Met Ala Phe Leu Gly Leu Phe Ser Leu Leu Val Leu Gln Ser Met Ala 5 10 Thr Gly Ala Thr Phe Pro Glu Glu Ala Ile Ala Asp Leu Ser Val Asn 20 25 Met Tyr Asn Arg Leu Arg Ala Thr Gly Glu Asp Glu Asn Ile Leu Phe 40 Ser Pro Leu Ser Ile Ala Leu Ala Met Gly Met Met Glu Leu Gly Ala 60 Gln Gly Ser Thr Gln Lys Glu Ile Arg His Ser Met Gly Tyr Asp Ser 70 Leu Lys Asn Gly Glu Glu Phe Ser Phe Leu Lys Glu Phe Ser Asn Met 8.5 90 Val Thr Ala Lys Glu Ser Gln Tyr Val Met Lys Ile Ala Asn Ser Leu 105 Phe Val Gln Asn Gly Phe His Val Asn Glu Glu Phe Leu Gln Met Met 120 Lys Lys Tyr Phe Asn Ala Ala Val Asn His Val Asp Phe Ser Gln Asn 135 140 Val Ala Val Ala Asn Tyr Ile Asn Lys Trp Val Glu Asn Asn Thr Asn 150 155 Asn Leu Val Lys Asp Leu Val Ser Pro Arg Asp Phe Asp Ala Ala Thr 170 165 Tyr Leu Ala Leu Ile Asn Ala Val Tyr Phe Lys Gly Asn Trp Lys Ser 185 Gln Phe Arg Pro Glu Asn Thr Arg Thr Phe Ser Phe Thr Lys Asp Asp 200 Glu Ser Glu Val Gln Ile Pro Met Met Tyr Gln Gln Gly Glu Phe Tyr 215 220 Tyr Gly Glu Phe Ser Asp Gly Ser Asn Glu Ala Gly Gly Ile Tyr Gln 230 235

Val Leu Glu Ile Pro Tyr Glu Gly Asp Glu Ile Ser Met Met Leu Val

Leu Ser Arg Gln Glu Val Pro Leu Ala Thr Leu Glu Pro Leu Val Lys
260 265 270

Ala Gln Leu Val Glu Glu Trp Ala Asn Ser Val Lys Lys Gln Lys Val
275 280 285

Glu Val Tyr Leu Pro Arg Phe Thr Val Glu Gln Glu Ile Asp Leu Lys 295 300 Asp Val Leu Lys Ala Leu Gly Ile Thr Glu Ile Phe Ile Lys Asp Ala 310 315 Asn Leu Thr Gly Leu Ser Asp Asn Lys Glu Ile Phe Leu Ser Lys Ala 330 Ile His Lys Ser Phe Leu Glu Val Asn Glu Glu Ala Gln Lys Leu Leu 345 Leu Ser Gln Glu \* 355 356

<210> 1240 <211> 707 <212> PRT <213> Homo sapiens

<400> 1240 Met Leu Ser Leu Arg Arg Cys Thr Ser Met Arg Leu Cys Leu Ser Ser Ser Leu Ala Ser Pro Cys Ser Thr Met Leu Ser Thr Val Val Leu Tyr 25 Lys Val Cys Asn Ser Phe Val Glu Met Gly Ser Ala Asn Val Gln Ala 40 Thr Asp Tyr Leu Lys Gly Val Ala Ser Leu Phe Val Val Ser Leu Gly 55 60 Gly Ala Ala Val Gly Leu Val Phe Ala Phe Leu Leu Ala Leu Thr Thr Arg Phe Thr Lys Arg Val Arg Ile Ile Glu Pro Leu Leu Val Phe Leu 85 90 Leu Ala Tyr Ala Ala Tyr Leu Thr Ala Glu Met Ala Ser Leu Ser Ala 100 105 110 Ile Leu Ala Val Thr Met Cys Gly Leu Gly Cys Lys Lys Tyr Val Glu 120 125 Ala Asn Ile Ser His Lys Ser Arg Thr Thr Val Lys Tyr Thr Met Lys 135 140 Thr Leu Ala Ser Cys Ala Glu Thr Val Ile Phe Met Leu Leu Gly Ile 145 150 155 Ser Thr Val Asp Ser Ser Lys Trp Ala Trp Asp Ser Gly Leu Val Leu 165 170 175 Gly Thr Leu Ile Phe Ile Leu Phe Phe Arg Ala Leu Gly Val Val Leu 185 190 Gln Thr Trp Val Leu Asn Gln Phe Arg Leu Val Pro Leu Asp Lys Ile 200 Asp Gln Val Val Met Ser Tyr Gly Gly Leu Arg Gly Ala Val Ala Phe 215 220 Ala Leu Val Ile Leu Leu Asp Arg Thr Lys Val Pro Ala Lys Asp Tyr 230 235 Phe Val Ala Thr Thr Ile Val Val Val Phe Phe Thr Val Ile Val Gln 245 250 Gly Leu Thr Ile Lys Pro Leu Val Lys Trp Leu Lys Val Lys Arg Ser 265 Glu His His Lys Pro Thr Leu Asn Gln Glu Leu His Glu His Thr Phe 280 285 Asp His Ile Leu Ala Ala Val Glu Asp Val Val Gly His His Gly Tyr 295 300 His Tyr Trp Arg Asp Arg Trp Glu Gln Phe Asp Lys Lys Tyr Leu Ser

```
305
                  310
                                    315
Gln Leu Leu Met Arg Arg Ser Ala Tyr Arg Ile Arg Asp Gln Ile Trp
              325
                                 330
Asp Val Tyr Tyr Arg Leu Asn Ile Arg Asp Ala Ile Ser Phe Val Asp
                            345
Gln Gly Gly His Val Leu Ser Ser Thr Gly Leu Thr Leu Pro Ser Met
                         360
Pro Ser Arg Asn Ser Val Ala Glu Thr Ser Val Thr Asn Leu Leu Arg
                     375
Glu Ser Gly Ser Gly Ala Cys Leu Asp Leu Gln Val Ile Asp Thr Val
                  390
                                   395
Arg Ser Gly Arg Asp Arg Glu Asp Ala Val Met His His Leu Leu Cys
                                 410
Gly Gly Leu Tyr Lys Pro Arg Arg Tyr Lys Ala Ser Cys Ser Arg
                             425
His Phe Ile Ser Glu Asp Ala Gln Glu Arg Gln Asp Lys Glu Val Phe
                         440
Gln Gln Asn Met Lys Arg Arg Leu Glu Ser Phe Lys Ser Thr Lys His
                    455
                                        460
Asn Ile Cys Phe Thr Lys Ser Lys Pro Arg Pro Arg Lys Thr Gly Arg
                 470
                                   475
Arg Lys Lys Asp Gly Val Ala Asn Ala Glu Ala Thr Asn Gly Lys His
              485
                                490
Arg Gly Leu Gly Phe Gln Asp Thr Ala Ala Val Ile Leu Thr Val Glu
                          505 510
Ser Glu Glu Glu Glu Glu Ser Asp Ser Ser Glu Thr Glu Lys Glu
                         520
Asp Asp Glu Gly Ile Ile Phe Val Ala Arg Ala Thr Ser Glu Val Leu
                     535
                                        540
Gln Glu Gly Lys Val Ser Gly Ser Leu Glu Val Cys Pro Ser Pro Arg
                 550
                                    555
Ile Ile Pro Pro Ser Pro Thr Cys Ala Glu Lys Glu Leu Pro Trp Lys
             565
                  570
Ser Gly Gln Gly Asp Leu Ala Val Tyr Val Ser Ser Glu Thr Thr Lys
                            585
Ile Val Pro Val Asp Met Gln Thr Gly Trp Asn Gln Ser Ile Ser Ser
      595 . 600
Leu Glu Ser Leu Ala Ser Pro Pro Cys Asn Gln Ala Pro Ile Leu Thr
                     615
                                       620
Cys Leu Pro Pro His Pro Arg Gly Thr Glu Glu Pro Gln Val Pro Leu
                                  635
              630
His Leu Pro Ser Asp Pro Arg Ser Ser Phe Ala Phe Pro Pro Ser Leu
                                650
Ala Lys Ala Gly Arg Ser Arg Ser Glu Ser Ser Ala Asp Leu Pro Gln
          660 .665
Gln Gln Glu Leu Gln Pro Leu Met Gly His Lys Asp His Thr His Leu
      675 . 680
Ser Pro Gly Thr Ala Thr Ser His Trp Cys Ile Gln Phe Asn Arg Gly
                     695
Ser Arg Leu
705 707
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<sup>&</sup>lt;210> 1241

<sup>&</sup>lt;211> 98

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<210> 1242 <211> 422 <212> PRT <213> Homo sapiens

<400> 1242 Met Val Leu Trp Glu Ser Pro Arg Gln Cys Ser Ser Trp Thr Leu Cys 10 Glu Gly Phe Cys Trp Leu Leu Leu Pro Val Met Leu Leu Ile Val 20 25 Ala Arg Pro Val Lys Leu Ala Ala Phe Pro Thr Ser Leu Ser Asp Cys 35 40 Gln Thr Pro Thr Gly Trp Asn Cys Ser Gly Tyr Asp Asp Arg Glu Asn 55 60 Asp Leu Phe Leu Cys Asp Thr Asn Thr Cys Lys Phe Asp Gly Glu Cys 70 Leu Arg Ile Gly Asp Thr Val Thr Cys Val Cys Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val Cys Gly Ser Asn Gly Glu Ser Tyr Gln Asn 105 110 Glu Cys Tyr Leu Arg Gln Ala Ala Cys Lys Gln Gln Ser Glu Ile Leu 120 Val Val Ser Glu Gly Ser Cys Ala Thr Asp Ala Gly Ser Gly Ser Gly 135 140 Asp Gly Val His Glu Gly Ser Gly Glu Thr Ser Gln Lys Glu Thr Ser 150 155 Thr Cys Asp Ile Cys Gln Phe Gly Ala Glu Cys Asp Glu Asn Ala Glu 165 170 Asp Val Trp Cys Val Cys Asn Ile Asp Cys Ser Gln Thr Asn Phe Asn 180 185 Pro Leu Cys Ala Ser Asp Gly Lys Ser Tyr Asp Asn Ala Cys Gln Ile 200 Lys Glu Ala Ser Cys Gln Lys Gln Glu Lys Ile Glu Val Leu Ser Leu 215 220 Gly Arg Cys Gln Asp Asn Thr Thr Thr Thr Thr Lys Ser Glu Asp Gly 230 235 His Tyr Ala Arg Thr Asp Tyr Ala Glu Asn Ala Asn Lys Leu Glu Glu 245 250 Ser Ala Arg Glu His His Ile Pro Cys Pro Glu His Tyr Asn Gly Phe

260 265 Cys Met His Gly Lys Cys Glu His Ser Ile Asn Met Gln Glu Pro Ser 280 Cys Arg Cys Asp Ala Gly Tyr Thr Gly Gln His Cys Glu Lys Lys Asp 290 295 300 Tyr Ser Val Leu Tyr Val Val Pro Gly Pro Val Arg Phe Pro Val Cys 305 310 315 Leu Asn Arg Ser Cys Asp Trp Asn Asn Ser Asp Cys Cys His Leu Cys 325 330 335 Gly Gly Pro Leu His His Lys Glu Met Pro Pro Glu Ala Asn Arg Ile 340 345 Pro Pro Asp Arg Ser Lys Ile Pro Gly His Tyr Ser Ser Arg Gln Tyr 355 360 Asn Lys Ser Arg Pro Thr Arg Leu Ile Leu Lys Gly Ala Cys Phe His 370 375 380 Ser Gly Trp Thr Thr Glu Ser Leu Asp Tyr Thr Ile Gln Tyr Tyr Arg 385 390 395 400 Gln Lys Asn Lys Thr Arg Asp Leu Thr His Val Cys Leu Ala Phe Val 405 410 Gly Asn Leu His Gln \* 420 421

<210> 1243 <211> 46 <212> PRT <213> Homo sapiens

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<210> 1244 <211> 46 <212> PRT <213> Homo sapiens

<210> 1245 <211> 244 <212> PRT

## <213> Homo sapiens

<400> 1245 Met Ala Gly Val Ile Ala Gly Leu Leu Met Phe Ile Ile Ile Leu Leu 5 Gly Val Met Leu Thr Ile Lys Arg Arg Arg Asn Ala Tyr Ser Tyr Ser 25 Tyr Tyr Leu Lys Leu Ala Lys Lys Gln Lys Glu Thr Gln Ser Gly Ala 40 Gln Arg Glu Met Gly Pro Val Ala Ser Ala Asp Lys Pro Thr Thr Lys 55 60 Leu Ser Ala Ser Arg Asn Asp Glu Gly Phe Ser Ser Ser Gln Asp 70 75 Val Asn Gly Phe Asn Gly Ser Arg Gly Glu Leu Ser Gln Pro Thr Leu 90 · Thr Ile Gln Thr His Pro Tyr Arg Thr Cys Asp Pro Val Glu Met Ser 105 Tyr Pro Arg Asp Gln Phe Gln Pro Ala Ile Arg Val Ala Asp Leu Leu 120 Gln His Ile Thr Gln Met Lys Arg Gly Gln Gly Tyr Gly Phe Lys Glu 135 140 Glu Tyr Glu Ala Leu Pro Glu Gly Gln Thr Ala Ser Trp Asp Thr Ala 150 155 Lys Glu Asp Glu Asn Arg Asn Lys Asn Arg Tyr Gly Asn Ile Ile Ser 165 170 Tyr Asp His Ser Arg Val Arg Leu Leu Val Leu Asp Gly Asp Pro His 180 185 Ser Asp Tyr Ile Asn Ala Asn Tyr Ile Asp Gly Tyr His Arg Pro Arg 200 205 His Tyr Ile Ala Thr Gln Gly Pro Met Gln Glu Thr Val Lys Asp Phe 210 215 220 Trp Arg Met Ile Trp Gln Glu Asn Ser Ala Ser Ile Val Met Val Thr 230 235 Asn Pro Gly 243

<210> 1246 <211> 565 <212> PRT <213> Homo sapiens

<400> 1246

 Met
 Ala
 Val
 Phe
 Arg
 Ser
 Gly
 Leu
 Val
 Leu
 Thr
 Thr
 Pro
 Leu
 Ala

 Ser
 Leu
 Ala
 Ser
 Ile
 Leu
 Thr
 Ser
 Ala
 Arg
 Leu

 Ser
 Leu
 Ala
 Ser
 Ile
 Leu
 Thr
 Ser
 Ala
 Arg
 Leu
 Arg
 Leu

 Val
 Ass
 His
 Thr
 Leu
 Tyr
 Val
 His
 Leu
 Gln
 Pro
 Gly
 Met
 Ser
 Leu
 Glu

 Gly
 Pro
 Ala
 Gln
 Tyr
 Val
 His
 Leu
 His
 His
 Incomparison
 His
 Incomparison
 Incomparison<

			100					105					110		
Val	Val	Leu 115	Thr	Asp	Phe	Gln	Thr 120		Asp	Gly	Ser	Gln 125		Asn	Pro
Val	Lys 130	Gln	Gln	Leu	Val	Arg 135	Tyr	Ala	Thr	Ser	Cys 140	Tyr	Ser	Суз	Суз
Pro 145	Arg	Leu	Ala	Ser	Val 150	Leu	Leu	Tyr	Ser	Asp 155	Tyr	Gly	Ile	Gly	Glu 160
			Glu	165					170					175	
			Val 180					185					190		
		195	Val				200	_	_			205			_
	210		Ser			215					220				
225			Asp		230					235					240
			Tyr	245					250					255	
			Pro 260					265					270		
		275	Ala				280					285			
	290		Tyr			295					300		_		
305			Glu Thr		310					315					320
			Met	325					330					335	
			340 Thr					345				_	350	_	
		355	Ser				360					365			_
	370		Ser			375		_		_	380				
385			Gln		390					395					400
			Ile	405					410					415	
	_	_	420 Gln			_	_	425				_	430		-
		435	Ala				440					445			
	450		Val			455		_			460			_	_
465		_	His		470	•				475			-	-	480
			Ile	485					490					495	
			500 Gln					505					510		
		515	Leu				520					525			
	530		Ala			535					540				
545	_			•	550	_ueu	Deu	OIH	-Jy 5	555	***		-175	****	560
GIN	Ala	ьeu	Asp 564	*											

<210> 1247 <211> 737 <212> PRT <213> Homo sapiens

<400> 1247 Met Phe Pro Ala Gly Pro Pro Trp Pro Arg Val Arg Val Val Gln Val. 10 Leu Trp Ala Leu Leu Ala Val Leu Leu Ala Ser Trp Arg Leu Trp Ala 25 Ile Lys Asp Phe Gln Glu Cys Thr Trp Gln Val Val Leu Asn Glu Phe 35 . 40 Lys Arg Val Gly Glu Ser Gly Val Ser Asp Ser Phe Phe Glu Gln Glu 55 Pro Val Asp Thr Val Ser Ser Leu Phe His Met Leu Val Asp Ser Pro 70 75 Ile Asp Pro Ser Glu Lys Tyr Leu Gly Phe Pro Tyr Tyr Leu Lys Ile 85 90 Asn Tyr Ser Cys Glu Glu Lys Pro Ser Glu Asp Leu Val Arg Met Gly 100 105 His Leu Thr Gly Leu Lys Pro Leu Val Leu Val Thr Phe Gln Ser Pro 120 Val Asn Phe Tyr Arg Trp Lys Ile Glu Gln Leu Gln Ile Gln Met Glu 135 140 Ala Ala Pro Phe Arg Ser Lys Gly Gly Pro Gly Gly Gly Gly Arg Asp 150 155 Arg Asn Leu Ala Gly Met Asn Ile Asn Gly Phe Leu Lys Arg Asp Arg 165 170 Asp Asn Asn Ile Gln Phe Thr Val Gly Glu Glu Leu Phe Asn Leu Met 180 185 190 Pro Gln Tyr Phe Val Gly Val Ser Ser Arg Pro Leu Trp His Thr Val 195 200 Asp Gln Ser Pro Val Leu Ile Leu Gly Gly Ile Pro Asn Glu Lys Tyr 210 215 220 Val Leu Met Thr Asp Thr Ser Phe Lys Asp Phe Ser Leu Val Glu Val 230 235 240 Asn Gly Val Gly Gln Met Leu Ser Ile Asp Ser Cys Trp Val Gly Ser 245 250 255 Phe Tyr Cys Pro His Ser Gly Phe Thr Ala Thr Ile Tyr Asp Thr Ile 265 Ala Thr Glu Ser Thr Leu Phe Ile Arg Gln Asn Gln Leu Val Tyr Tyr 280 Phe Thr Gly Thr Tyr Thr Thr Leu Tyr Glu Arg Asn Arg Gly Ser Gly 295 Glu Cys Ala Val Ala Gly Pro Thr Pro Gly Glu Gly Thr Leu Val Asn 310 315 Pro Ser Thr Glu Gly Ser Trp Ile Arg Val Leu Ala Ser Glu Cys Ile 325 330 Lys Lys Leu Cys Pro Val Tyr Phe His Ser Asn Gly Ser Glu Tyr Ile 345 Met Ala Leu Thr Thr Gly Lys His Glu Gly Tyr Val His Phe Gly Thr Ile Arg Val Thr Thr Cys Ser Ile Ile Trp Ser Glu Tyr Ile Ala Gly 375 380 Glu Tyr Thr Leu Leu Leu Val Glu Ser Gly Tyr Gly Asn Ala Ser

```
390
                               395
Lys Arg Phe Gln Val Val Ser Tyr Asn Thr Ala Ser Asp Asp Leu Glu
      405
                410
Leu Leu Tyr His Ile Pro Glu Phe Ile Pro Glu Ala Arg Gly Leu Glu
        420 425 430
Phe Leu Met Ile Leu Gly Thr Glu Ser Tyr Thr Ser Thr Ala Met Ala
                          445
                     440
Pro Lys Gly Ile Phe Cys Asn Pro Tyr Asn Asn Leu Ile Phe Ile Trp
                  455
                                 460
Gly Asn Phe Leu Leu Gln Ser Ser Asn Lys Glu Asn Phe Ile Tyr Leu
465 470
                               475
Ala Asp Phe Pro Lys Glu Leu Ser Ile Lys Tyr Met Ala Arg Ser Phe
   · 485
                           490
Arg Gly Ala Val Ala Ile Val Thr Glu Thr Glu Glu Ile Trp Tyr Leu
        500 505
Leu Glu Gly Ser Tyr Arg Val Tyr Gln Leu Phe Pro Ser Lys Gly Trp
                          525
          520
Gln Val His Ile Ser Leu Lys Leu Met Gln Gln Ser Ser Leu Tyr Ala
        535
                                  540
Ser Asn Glu Thr Met Leu Thr Leu Phe Tyr Glu Asp Ser Lys Leu Tyr
        550
                              555
Gln Leu Val Tyr Leu Met Asn Asn Gln Lys Gly Gln Leu Val Lys Arg
            565
                           570
Leu Val Pro Val Glu Gln Leu Leu Met Tyr Gln Gln His Thr Ser His
                         585
Tyr Asp Leu Glu Arg Lys Gly Gly Tyr Leu Met Leu Ser Phe Ile Asp
                     600
Phe Cys Pro Phe Ser Val Met Arg Leu Arg Ser Leu Pro Ser Pro Gln
                  615
                         620
Arg Tyr Thr Arg Gln Glu Arg Tyr Arg Ala Arg Pro Pro Arg Val Leu
              630
                             635 640
Glu Arg Ser Gly Phe Pro Gln Gly Glu Leu Ala Arg His Leu Pro Gly
                           650 655
Pro Gly Leu Leu Pro Ala Val Ala Ala Leu Arg Val Arg Gln Ala Val
      660 665 670
Arg Gly Pro Gly Ala Arg Pro His Leu Ala Leu Val Gly Glu Gln Gln
     675 680 685
Thr Arg Pro Gly Leu Leu Leu Leu Gly Glu Gln Leu Ala Lys Arg
                   695
Gly Arg Arg Val His Arg Asn Gly Gln Leu Arg Lys Asp Leu Gln Pro
               710
                               715
Arg Val Arg Val Arg Ala Ala Gly Ala His Phe Pro Gly Gln Gly His
            725
                            730
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<210> 1248 <211> 175 <212> PRT <213> Homo sapiens

Pro Pro His Leu Ser His Trp Cys Leu Ser Pro Met Gln Met Asp Asp 35 40 Gly Cys Ala Arg Leu Cys Val Leu Trp Thr Ala Trp Met Arg Trp Arg Val Leu Met Cys Ser Cys Arg Val Trp Ala Thr Asp Leu Gly Ile Phe 75 Leu Gly Val Ala Leu Gly Asn Glu Pro Leu Glu Met Trp Pro Leu Thr 90 Gln Asn Glu Glu Cys Thr Val Thr Gly Phe Leu Arg Asp Lys Leu Gln Tyr Arg Ser Arg Leu Gln Tyr Met Lys His Tyr Phe Pro Ile Asn Tyr 120 Lys Ile Arg Val Pro Tyr Glu Gly Val Phe Arg Ile Ala Asn Val Thr 135 Arg Leu Arg Ala Gln Gly Ser Glu Arg Glu Leu Arg Tyr Leu Gly Val 145 150 155 Leu Val Ser Leu Ser Ala Thr Glu Ser Val His Asp Glu Leu Leu 170

<210> 1249

<211> 68

<212> PRT

<213> Homo sapiens

<400> 1249

 Met
 Phe
 His
 Arg
 Cys
 Arg
 Leu
 Lys
 Ala
 Gly
 Leu
 Met
 Leu
 Trp
 Arg
 Ser

 Leu
 Glu
 Ser
 Gly
 Leu
 Cys
 Ala
 Gly
 Ala
 His
 Arg
 Leu
 Trp
 Leu
 Glu
 Gly
 Gly
 Ala
 His
 Arg
 Leu
 Trp
 Leu
 Gly
 Gly
 Gly
 Ala
 His
 Arg
 Leu
 Trp
 Leu
 Ala
 Ser
 Ala
 Gly
 Leu
 Ala
 Ser
 Ala
 Gly
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 Ala
 Ala

<210> 1250

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1250

 Met
 Ser
 Phe
 Cys
 Phe
 Thr
 Phe
 Leu
 Ser
 Leu
 Leu
 Pro
 Ala
 Cys
 Ile
 Lys

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85 90 Ala Phe Phe Ile Ala Cys Val Thr Ser Phe Ser Ile Phe Glu Lys Thr 105 110 Ser Glu Glu Glu Leu Gln Leu Lys Ser Phe Ser Ile Ser Val Arg Lys 120 125 Tyr Leu Pro Cys Phe Thr Phe Leu Ser Arg Ile Ile Gln Tyr Leu Phe 135 140 Leu Ile Ser Val Ile Thr Met Val Leu Leu Thr Leu Met Thr Val Thr 150 155 Leu Asp Pro Pro Gln Lys Leu Pro Asp Leu Phe Ser Val Leu Val Cys 165 170 175 Phe Val Ser Cys Leu Asn Phe Leu Phe Phe Leu Val Tyr Phe Asn Ile 180 185 190 Ile Ile Met Trp Asp Ser Lys Ser Gly Arg Asn Gln Lys Lys Ile Ser 200 205 208

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<211> 58

<212> PRT

<213> Homo sapiens

<400> 1251

<210> 1252

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1252

 Met
 Tyr
 Lys
 Asn
 Phe
 Cys
 Leu
 Phe
 Phe
 Ile
 Phe
 Ala
 Leu
 Tyr
 Gly
 Leu
 Trp
 Ala
 Asn
 Ser
 Asn
 Pro
 Leu
 His
 Val
 Ser

 Val
 Tyr
 Lys
 Ile
 Leu
 Leu
 Gly
 Cys
 Val
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 Trp
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 Val
 Val
 Pro
 Trp
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 Leu
 Ser
 Val
 Val

<210> 1253 <211> 73 <212> PRT <213> Homo sapiens

> <210> 1254 <211> 209 <212> PRT <213> Homo sapiens

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<210> 1255 <211> 730 <212> PRT <213> Homo sapiens

<400> 1255 Met Gly Pro Trp Gly Trp Lys Leu Arg Trp Thr Val Ala Leu Leu Leu 10 Ala Ala Gly Thr Ala Val Gly Asp Arg Cys Glu Arg Asn Glu Phe Gln Cys Gln Asp Gly Lys Cys Ile Ser Tyr Lys Trp Val Cys Asp Gly Ser Ala Glu Cys Gln Asp Gly Ser Asp Glu Ser Gln Glu Thr Cys Leu 55 Ser Val Thr Cys Lys Ser Gly Asp Phe Ser Cys Gly Gly Arg Val Asn 70 75 Arg Cys Ile Pro Gln Phe Trp Arg Cys Asp Gly Gln Val Asp Cys Asp 85 90 Asn Gly Ser Asp Glu Gln Gly Cys Pro Pro Lys Thr Cys Ser Gln Asp 105 Glu Phe Arg Cys His Asp Gly Lys Cys Ile Ser Arg Gln Phe Val Cys 120 125 Asp Ser Asp Arg Asp Cys Leu Asp Gly Ser Asp Glu Ala Ser Cys Pro 135 140 Val Leu Thr Cys Gly Pro Ala Ser Phe Gln Cys Asn Ser Ser Thr Cys 150 155 Ile Pro Gln Leu Trp Ala Cys Asp Asn Asp Pro Asp Cys Glu Asp Gly 170 165 Ser Asp Glu Trp Pro Gln Arg Cys Arg Gly Leu Tyr Val Phe Gln Gly 185 Asp Ser Ser Pro Cys Ser Ala Phe Glu Phe His Cys Leu Ser Gly Glu 195 200 Cys Ile His Ser Ser Trp Arg Cys Asp Gly Gly Pro Asp Cys Lys Asp 215 220 Lys Ser Asp Glu Glu Asn Cys Ala Val Ala Thr Cys Arg Pro Asp Glu 230 235 Phe Gln Cys Ser Asp Gly Asn Cys Ile His Gly Ser Arg Gln Cys Asp 250 Arg Glu Tyr Asp Cys Lys Asp Met Ser Asp Glu Val Gly Cys Val Asn 265 260 270 Val Thr Leu Cys Glu Gly Pro Asn Lys Phe Lys Cys His Ser Gly Glu 280 Cys Ile Thr Leu Asp Lys Val Cys Asn Met Ala Arg Asp Cys Arg Asp 300 295 Trp Ser Asp Glu Pro Ile Lys Glu Cys Gly Thr Asn Glu Cys Leu Asp 310 315 Asn Asn Gly Gly Cys Ser His Val Cys Asn Asp Leu Lys Ile Gly Tyr 325 330 Glu Cys Leu Cys Pro Asp Gly Phe Gln Leu Val Ala Gln Arg Arg Cys 345 Glu Asp Ile Asp Glu Cys Gln Asp Pro Asp Thr Cys Ser Gln Leu Cys 360 Val Asn Leu Glu Gly Gly Tyr Lys Cys Gln Cys Glu Glu Gly Phe Gln 375 380 Leu Asp Pro His Thr Lys Ala Cys Lys Ala Val Gly Ser Ile Ala Tyr 390 395 Leu Phe Phe Thr Asn Arg His Glu Val Arg Lys Met Thr Leu Asp Arg

```
Ser Glu Tyr Thr Ser Leu Ile Pro Asn Leu Arg Asn Val Val Ala Leu
                            425
          420
Asp Thr Glu Val Ala Ser Asn Arg Ile Tyr Trp Ser Asp Leu Ser Gln
                        440
Arg Met Ile Cys Ser Thr Gln Leu Asp Arg Ala His Gly Val Ser Ser
                     455
Tyr Asp Thr Val Ile Ser Arg Asp Ile Gln Ala Pro Asp Gly Leu Ala
                470
                                   475
Val Asp Trp Ile His Ser Asn Ile Tyr Trp Thr Asp Ser Val Leu Gly
                               490
Thr Val Ser Val Ala Asp Thr Lys Gly Val Lys Arg Lys Thr Leu Phe
          500 505
Arg Glu Asn Gly Ser Lys Pro Arg Ala Ile Val Val Asp Pro Val His
              520
                                          525
Gly Phe Met Tyr Trp Thr Asp Trp Gly Thr Pro Ala Lys Ile Lys Lys
                    535
                              540
Gly Gly Leu Asn Gly Val Asp Ile Tyr Ser Leu Val Thr Glu Asn Ile
       550
                          555
Gln Trp Pro Asn Gly Ile Thr Leu Asp Leu Leu Ser Gly Arg Leu Tyr
                               570
Trp Val Asp Ser Lys Leu His Ser Ile Ser Ser Ile Asp Val Asn Gly
                             585
Gly Asn Arg Lys Thr Ile Leu Glu Asp Glu Lys Arg Leu Ala His Pro
                      600
Phe Ser Leu Ala Val Phe Glu Asp Lys Val Phe Trp Thr Asp Ile Ile
                                    620
                  615
Asn Glu Ala Ile Phe Ser Ala Asn Arg Leu Thr Gly Ser Asp Val Asn
               630
                                   635
Leu Leu Ala Glu Asn Leu Leu Ser Pro Glu Asp Met Val Leu Phe His
                               650
Asn Leu Thr Gln Pro Arg Gly Val Asn Trp Cys Glu Arg Thr Thr Leu
                  665
Ser Asn Gly Gly Cys Gln Tyr Leu Cys Leu Pro Ala Pro Gln Ile Asn
              680
Pro His Ser Pro Lys Phe Thr Cys Ala Cys Pro Asp Gly Met Leu Leu
                     695
                           700
Ala Arg Gly His Glu Glu Leu Pro His Arg Gly Leu Arg Leu Gln Trp
                 710
Pro Pro Arg Arg His Pro Pro Ser Gly *
              725
                             729
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<210> 1256

<211> 264

<212> PRT

<213> Homo sapiens

<400> 1256

 Met Arg Gly Asn Leu Ala Leu Val Gly Val Leu Ile Ser Leu Ala Phe

 1
 5
 10
 15

 Leu Ser Leu Leu Pro Ser Gly His Pro Gln Pro Ala Gly Asp Asp Ala
 20
 25
 30

 Cys Ser Val Gln Ile Leu Val Pro Gly Leu Lys Gly Asp Ala Gly Glu
 45

 Lys Gly Asp Lys Gly Ala Pro Gly Arg Pro Gly Arg Val Gly Pro Thr
 50
 55
 60

 Gly Glu Lys Gly Asp Met Gly Asp Lys Gly Gln Lys Gly Ser Val Gly
 55
 60

70 75 Arg His Gly Lys Ile Gly Pro Ile Gly Ser Lys Gly Glu Lys Gly Asp 90 Ser Gly Asp Ile Gly Pro Pro Gly Pro Asn Gly Glu Pro Gly Leu Pro 105 Cys Glu Cys Ser Gln Leu Arg Lys Ala Ile Gly Glu Met Asp Asn Gln 120 Val Ser Gln Leu Thr Ser Glu Leu Lys Phe Ile Lys Asn Ala Val Ala 135 140 Gly Val Arg Glu Thr Glu Ser Lys Ile Tyr Leu Leu Val Lys Glu Glu 155 145 150 Lys Arg Tyr Ala Asp Ala Gln Leu Ser Cys Gln Gly Arg Gly Gly Thr 165 170 Leu Ser Met Pro Lys Asp Glu Ala Ala Asn Gly Leu Met Ala Ala Tyr 185 180 Leu Ala Gln Ala Gly Leu Ala Arg Val Phe Ile Gly Ile Asn Asp Leu 200 205 Glu Lys Glu Gly Ala Phe Val Tyr Ser Asp His Ser Pro Met Arg Thr 215 220 Phe Asn Lys Trp Arg Ser Gly Glu Pro Asn Ala Tyr Asp Glu Glu 230 235 Asp Cys Val Glu Met Val Ala Ser Gly Gly Trp Asn Asp Val Ala Cys 245 250 His Thr Thr Met Tyr Phe Met \* 260 263

<210> 1257 <211> 407 <212> PRT

<213> Homo sapiens

<400> 1257

Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu Cys Ala Ala Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln Ser Lys Ser 25 Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala His Gly Leu 40 Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg Thr Arg Ser 55 60 Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly Ser Ala Cys Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro Glu Ser Arg 90 Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu Lys Ala Gln 105 110 100 Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln Gln Gln Arg 115 120 125 His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln Ser Gln Phe 135 140 Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala Lys Pro Ala 150 155 Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp Pro Ala His 165 170 Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln Glu Leu Phe 180 185 190

Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln Pro Gln Gly 195 200 Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp Gly Gly Trp 215 Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe Asn Arg Pro 230 235 Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly Glu Phe Trp 250 Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg Asn Ser Arg 265 Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu Leu Leu Gln 280 285 Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser Leu Gln Leu 295 300 Thr Ala Pro Val Ala Gly Gln Leu Gly Ala Thr Thr Val Pro Pro Ser 305 310 315 Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His Asp Leu Arg 325 330 Arg Asp Lys Asn Cys Ala Lys Ser Leu Ser Gly Gly Trp Trp Phe Gly 340 345 Thr Cys Ser His Ser Asn Leu Asn Gly Gln Tyr Phe Arg Ser Ile Pro 355 360 Gln Gln Arg Gln Lys Leu Lys Lys Gly Ile Phe Trp Lys Thr Trp Arg 370 375 380 Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile Gln Pro Met 390 395 Ala Ala Glu Ala Ala Ser \* 405 406

<210> 1258 <211> 120 <212> PRT <213> Homo sapiens

<400> 1258

Met Met Thr Pro Lys Leu Met Ile Trp Leu Leu Gln Ala Lys Ser 5 10 Ser Ile Ser Met Leu Glu Lys Ser Ser Lys Cys Leu Gly Arg Cys Phe 25 Ser Ser Phe Ala Lys Asn Leu Val Met Ile Gln Ser Cys Val Ser Trp 40 Ala Leu Met Ser Glu Asn Phe Tyr Arg Thr Leu Met Leu Cys Thr Thr 55 Thr Leu Leu Pro Ser Thr Gln Glu Cys Val His Leu Pro Leu Gly Ala 70 75 Leu Met Gln Lys Arg Ala Lys Asp Ser Phe Cys Thr Thr Thr Gln Arg 90 Glu Lys Asp Phe Arg Ile Leu Ser Leu Glu Ser Ser Lys Gln Trp His 105 Asn Lys Ser Met Ala Leu Lys \* 115 119

<210> 1259 <211> 160

<212> PRT

<213> Homo sapiens

<400> 1259 Met Val Cys Leu Arg Leu Pro Gly Gly Ser Cys Met Ala Val Leu Thr 10 Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr 20 25 Arg Pro Arg Phe Leu Glu Tyr Ser Thr Gly Glu Cys Tyr Phe Phe Asn 40 Gly Thr Glu Arg Val Arg Phe Leu Asp Arg Tyr Phe Tyr Asn Gln Glu 55 Glu Tyr Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr 70 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Leu Glu Gln Pro Glu Gly Arg 85 90 Pro Trp Asn Ser Gln Lys Asp Ile Leu Glu Asp Glu Arg Ala Ala Val 100 105 110 Asp Thr Tyr Cys Arg His Asn Tyr Gly Val Val Glu Ser Phe Thr Val 115 120 125 Gln Arg Arg Val His Pro Lys Val Thr Val Tyr Pro Ser Lys Thr Gln 135 140

Pro Leu Gln Ala Pro Gln Pro Ala Val Leu Phe Cys Glu Trp Phe \*

155

<210> 1260

<211> 111

<212> PRT

<213> Homo sapiens

145 150

<400> 1260

 Met
 Leu
 Thr
 Phe
 Leu
 Met
 Leu
 Val
 Arg
 Leu
 Ser
 Thr
 Leu
 Cys
 Pro
 Ser

 Ala
 Val
 Leu
 Glu
 Arg
 Leu
 Arg
 Leu
 Val
 Glu
 Pro
 Leu
 Arg
 Ala
 Thr

 Cys
 Thr
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 Lys
 Val
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 Arg
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 Ala
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 Leu
 Ala
 Ala
 Ile
 Ile

<210> 1261

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1261

 Met
 Ile
 Pro
 Ala
 Arg
 Phe
 Ala
 Gly
 Val
 Leu
 Leu
 Ala
 Leu
 Ile
 Ile
 Ala
 Leu
 Ile
 Ile</th

<210> 1262 <211> 737 <212> PRT

<213> Homo sapiens

<400> 1262 Met Phe Pro Ala Gly Pro Pro Trp Pro Arg Val Arg Val Val Gln Val 10 Leu Trp Ala Leu Leu Ala Val Leu Leu Ala Ser Trp Arg Leu Trp Ala 20 25 Ile Lys Asp Phe Gln Glu Cys Thr Trp Gln Val Val Leu Asn Glu Phe 40 Lys Arg Val Gly Glu Ser Gly Val Ser Asp Ser Phe Phe Glu Glu Glu 55 Pro Val Asp Thr Val Ser Ser Leu Phe His Met Leu Val Asp Ser Pro 70 75 Ile Asp Pro Ser Glu Lys Tyr Leu Gly Phe Pro Tyr Tyr Leu Lys Ile . 90 95 Asn Tyr Ser Cys Glu Glu Lys Pro Ser Glu Asp Leu Val Arg Met Gly 105 His Leu Thr Gly Leu Lys Pro Leu Val Leu Val Thr Phe Gln Ser Pro 120 Val Asn Phe Tyr Arg Trp Lys Ile Glu Gln Leu Gln Ile Gln Met Glu 135 140 Ala Ala Pro Phe Arg Ser Lys Gly Gly Pro Gly Gly Gly Gly Arg Asp 150 155 Arg Asn Leu Ala Gly Met Asn Ile Asn Gly Phe Leu Lys Arg Asp Arg 170 Asp Asn Asn Ile Gln Phe Thr Val Gly Glu Glu Leu Phe Asn Leu Met 185 Pro Gln Tyr Phe Val Gly Val Ser Ser Arg Pro Leu Trp His Thr Val 200 Asp Gln Ser Pro Val Leu Ile Leu Gly Gly Ile Pro Asn Glu Lys Tyr 215 220 Val Leu Met Thr Asp Thr Ser Phe Lys Asp Phe Ser Leu Val Glu Val 230 235 Asn Gly Val Gly Gln Met Leu Ser Ile Asp Ser Cys Trp Val Gly Ser 250 Phe Tyr Cys Pro His Ser Gly Phe Thr Ala Thr Ile Tyr Asp Thr Ile

			260					265	•				270		
Ala	Thr	Glu 275	Ser	Thr	Leu	Phe	Ile 280	Arg	Gln	Asn	Gln	Leu 285	Val	Tyr	Tyr
Phe	Thr 290	Gly	Thr	Tyr	Thr	Thr 295	Leu	Tyr	Glu	Arg	Asn 300	Arg	Gly	Ser	Gly
Glu 305	Cys	Ala	Val	Ala	Gly 310	Pro	Thr	Pro	Gly	Glu 315	Gly	Thr	Leu	Val	Asn 320
Pro	Ser	Thr	Glu	Gly 325	Ser	Trp	Ile	Arg	Val 330	Leu	Ala	Ser	Glu	Cys 335	Ile
			Cys 340					345					350		
		355	Thr				360					365			
	370		Thr			375					380				_
385			Leu		390					395		_			400
			Gln	405					410					415	
			His 420					425					430		
		435	Ile				440					445			
	450		Ile			455					460				
465			Leu		470					475				_	480
			Pro	485					490					495	
			Val 500					505					510	-	
		515	Ser				520					525	-		
	530		Ile			535					540				
545			Thr		550					555					560
			Tyr	565					570					575	_
			Val 580					585					590		
		595	Glu				600					605			
	610		Phe			615					620				
625			Arg		630					635					640
			Gly	645					650					655	-
			Leu 660					665					670		
		675	Gly				680					685			
	690		Gly			695			-		700			•	J
705			Val		710					715					720
wrd	val	Arg	Val	725	ита	нта	стХ	ATA	730	rne	Pro	стА	GIN	735	

<210> 1263 <211> 48

<213> Homo sapiens

<400> 1263

<212> PRT

<210> 1264 <211> 61 <212> PRT <213> Homo sapiens

<400> 1264

 Met Met Tyr Ile Leu Phe Leu Gln Ala Phe Ile Leu Asp Tyr Tyr Gln

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 10
 15

 Tyr Phe Leu Gly Leu Asn Cys Val Tyr Ser Tyr Gln Ser Lys Lys Asp 20
 25
 30

 Phe Ser Gln Ile Trp Ser Gln Gly Trp Phe Ala Leu Leu Trp Ile Leu 35
 45

 Cys Leu Ser Arg Ile Leu Glu Ser Phe Phe Phe Leu \*
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<210> 1265 <211> 58 <212> PRT <213> Homo sapiens

<400> 1265

<210> 1266 <211> 148

<212> PRT <213> Homo sapiens

<400> 1266 Met Ala Leu Gln Leu Trp Ala Leu Thr Leu Leu Gly Leu Leu Gly Ala 10 Gly Ala Ser Leu Arg Pro Arg Lys Leu Asp Phe Phe Arg Ser Glu Lys 25 Glu Leu Asn His Leu Ala Val Asp Glu Ala Ser Gly Val Val Tyr Leu 40 Gly Ala Val Asn Ala Leu Tyr Gln Leu Asp Ala Lys Leu Gln Leu Glu 55 Gln Gln Val Ala Thr Gly Pro Val Leu Asp Asn Lys Lys Cys Thr Pro 75 Pro Ile Glu Ala Ser Gln Cys His Glu Ala Glu Met Thr Asp Asn Val 85 90 Asn Gln Leu Leu Val Asp Pro Pro Arg Lys Arg Leu Val Glu Cys 100 105 Gly Gln Leu Leu Lys Gly Ile Leu Arg Ser Ala Arg Pro Glu Gln His 120 125 Leu Pro Pro Pro Val Leu Arg Gly Arg Gln Arg Gly Glu Val Phe Arg 135 Gly Gln Gln \* 145 147

<210> 1267 <211> 227 <212> PRT <213> Homo sapiens

<400> 1267

Met Arg Trp Leu Trp Pro Leu Ala Val Ser Leu Ala Val Ile Leu Ala 1 5 10 15 Val Gly Leu Ser Arg Val Ser Gly Gly Ala Pro Leu His Leu Gly Arg 20 25 His Arg Ala Glu Thr Gln Glu Gln Gln Ser Arg Ser Lys Arg Gly Thr 40 Glu Asp Glu Glu Ala Lys Gly Val Gln Gln Tyr Val Pro Glu Glu Trp 55 Ala Glu Tyr Pro Arg Pro Ile His Pro Ala Gly Leu Gln Pro Thr Lys 70 Pro Leu Val Ala Thr Ser Pro Asn Pro Asp Lys Asp Gly Gly Thr Pro 90 Asp Ser Gly Gln Glu Leu Arg Gly Asn Leu Thr Gly Ala Pro Gly Gln 105 Arg Leu Gln Ile Gln Asn Pro Leu Tyr Pro Val Thr Glu Ser Ser Tyr 120 Ser Ala Tyr Ala Ile Met Leu Leu Ala Leu Val Glu Phe Ala Ala Gly 135 Ile Val Gly Asn Leu Ser Val Met Cys Ile Ala Trp His Ser Tyr Tyr 150 155 Leu Lys Ser Ala Trp Asn Ser Ile Leu Ala Ser Leu Ala Leu Trp Asp 165 170 175 Phe Leu Val Leu Phe Phe Cys Leu Pro Ile Val Ile Leu Asn Glu Ile 185

<210> 1268 <211> 983 <212> PRT <213> Homo sapiens

<400> 1268 Met Leu Gly Asn Val Leu Leu Cys Phe Phe Val Phe Phe Ile Phe Gly Ile Val Gly Val Gln Leu Trp Ala Gly Leu Leu Arg Asn Arg Cys 20 25 Phe Leu Pro Glu Asn Phe Ser Leu Pro Leu Ser Val Asp Leu Glu Arg 40 Tyr Tyr Gln Thr Glu Asn Glu Asp Glu Ser Pro Phe Ile Cys Ser Gln 55 60 Pro Arg Glu Asn Gly Met Arg Ser Cys Arg Ser Val Pro Thr Leu Arg Gly Asp Gly Gly Gly Pro Pro Cys Gly Leu Asp Tyr Glu Ala Tyr 90 Asn Ser Ser Ser Asn Thr Thr Cys Val Asn Trp Asn Gln Tyr Tyr Thr 105 Asn Cys Ser Ala Gly Glu His Asn Pro Phe Lys Gly Ala Ile Asn Phe 120 125 Asp Asn Ile Gly Tyr Ala Trp Ile Ala Ile Phe Gln Val Ile Thr Leu 135 140 Glu Gly Trp Val Asp Ile Met Tyr Phe Val Met Asp Ala His Ser Phe 150 155 Tyr Asn Phe Ile Tyr Phe Ile Leu Leu Ile Ile Val Gly Ser Phe Phe 165 170 Met Ile Asn Leu Cys Leu Val Val Ile Ala Thr Gln Phe Ser Glu Thr 185 Lys Gln Arg Glu Ser Gln Leu Met Arg Glu Gln Arg Val Arg Phe Leu 200 Ser Asn Ala Ser Thr Leu Ala Ser Phe Ser Glu Pro Gly Ser Cys Tyr 215 Glu Glu Leu Leu Lys Tyr Leu Val Tyr Ile Leu Arg Lys Ala Ala Arg 230 235 Arg Leu Ala Gln Val Ser Arg Ala Ala Gly Val Arg Val Gly Leu Leu 250 Ser Ser Pro Ala Pro Leu Gly Gly Gln Glu Thr Gln Pro Ser Ser Ser 265 Cys Ser Arg Ser His Arg Arg Leu Ser Val His His Leu Val His His 280 285 His His His His His His Tyr His Leu Gly Asn Gly Thr Leu Arg 295 300 Ala Pro Arg Ala Ser Pro Glu Ile Gln Asp Arg Asp Ala Asn Gly Ser 310 315 Arg Arg Leu Met Leu Pro Pro Pro Ser Thr Pro Ala Leu Ser Gly Ala 325 . 330 Pro Pro Gly Gly Ala Glu Ser Val His Ser Phe Tyr His Ala Asp Cys

			340					345					350		
His	Leu	Glu 355	Pro	Val	Arg	Cys	Gln 360	Ala	Pro	Pro	Pro	Arg 365	Ser	Pro	Ser
Glu	Ala 370	Ser	Gly	Arg	Thr	Val 375	Gly	Ser	Gly	Lys	Val 380	Tyr	Pro	Thr	Val
His 385	Thr	Ser	Pro	Pro	Pro 390	Glu	Thr	Leu	Lys	Glu 395	Lys	Ala	Leu	Val	Glu 400
Val	Ala	Ala	Ser	Ser 405	Gly	Pro	Pro	Thr	Leu 410	Thr	Ser	Leu	Asn	Ile 415	Pro
Pro	Gly	Pro	Tyr 420	Ser	Ser	Met	His	Lys 425	Leu	Leu	Glu	Thr	Gln 430	Ser	Thr
Gly	Ala	Cys 435	Gln	Ser	Ser	Cys	Lys 440	Ile	Ser	Ser	Pro	Cys 445	Leu	Lys	Ala
Asp	Ser 450	Gly	Ala	Cys	Gly	Pro 455	Asp	Ser	Cys	Pro	Tyr 460	Cys	Ala	Arg	Ala
Gly 465		Gly	Glu	Val	Glu 470		Ala	Asp	Arg	Glu 475		Pro	Asp	Ser	Asp
	Glu	Ala	Val	Tyr 485		Phe	Thr	Gln	Asp		Gln	His	Ser	Asp	
Arg	Asp	Pro	His 500	Ser	Arg	Arg	Gln	Arg 505	Ser	Leu	Gly	Pro	Asp 510		Glu
Pro	Ser	Ser 515	Val	Leu	Ala	Phe	Trp 520	Arg	Leu	Ile	Cys	Asp 525	Thr	Phe	Arg
	530			Ser		535				_	540				
545				Leu	550					555					560
				Ala 565					570					575	
			580	Met				585					590		_
		595		Pro			600	•				605			
	610			Ile		615					620				
625				Leu	630					635					640
				Gln 645					650					655	
			660	Met -				665					670		
		675		Leu			680					685			_
	690			Asp		695					700				
705				Gln	710					715	_				720
				Ala 725					730				_	735	
			740	Phe				745					750		
		755		Gly			760					765			
Ser	Glu 770	Pro	Asp	Phe	Phe	Ser 775	Pro	Ser	Leu	Asp	Gly 780	Asp	Gly	Asp	Arg
Lys 785	Lys	Cys	Leu	Ala	Leu 790	Val	Ser	Leu	Gly	Glu 795	His	Pro	Glu	Leu	Arg 800
Lys	Ser	Leu	Leu	Pro 805	Pro	Leu	Ile	Ile	His 810	Thr	Ala	Ala	Thr	Pro 815	Met

Ser Leu Pro Lys Ser Thr Ser Thr Gly Leu Gly Glu Ala Leu Gly Pro 820 825 Ala Ser Arg Arg Thr Ser Ser Ser Gly Ser Ala Glu Pro Gly Ala Ala 835 840 His Glu Met Lys Ser Pro Pro Ser Ala Arg Ser Ser Pro His Ser Pro Trp Ser Ala Ala Ser Ser Trp Thr Ser Arg Arg Ser Ser Arg Asn Ser 865 870 875 Leu Gly Arg Ala Pro Ser Leu Lys Arg Arg Ser Pro Ser Gly Glu Arg 890 Arg Ser Leu Leu Ser Gly Glu Gly Gln Glu Ser Gln Asp Glu Glu Glu 900 905 Ser Ser Glu Glu Glu Arg Ala Ser Pro Ala Gly Ser Asp His Arg His 925 920 Arg Gly Ser Leu Glu Arg Glu Ala Lys Ser Ser Phe Asp Leu Pro Asp 935 940 Thr Leu Gln Val Pro Gly Leu His Arg Thr Ala Ser Gly Arg Gly Ser 945 950 955 Ala Ser Glu His Gln Gly Leu Gln Trp Gln Val Gly Phe Arg Ala Pro 965 Gly Pro Gly Pro Ala Ala \* 980 982

<210> 1269 <211> 708 <212> PRT <213> Homo sapiens

<400> 1269

Met Leu Ser Leu Arg Arg Cys Thr Ser Met Arg Leu Cys Leu Ser Ser 10 Ser Leu Ala Ser Pro Cys Ser Thr Met Leu Ser Thr Val Val Leu Tyr 20 25 Lys Val Cys Asn Ser Phe Val Glu Met Gly Ser Ala Asn Val Gln Ala 40 Thr Asp Tyr Leu Lys Gly Val Ala Ser Leu Phe Val Val Ser Leu Gly 55 Gly Ala Ala Val Gly Leu Val Phe Ala Phe Leu Leu Ala Leu Thr Thr 70 75 Arg Phe Thr Lys Arg Val Arg Ile Ile Glu Pro Leu Leu Val Phe Leu 85 90 Leu Ala Tyr Ala Ala Tyr Leu Thr Ala Glu Met Ala Ser Leu Ser Ala 105 Ile Leu Ala Val Thr Met Cys Gly Leu Gly Cys Lys Lys Tyr Val Glu 120 Ala Asn Ile Ser His Lys Ser Arg Thr Thr Val Lys Tyr Thr Met Lys 135 140 Thr Leu Ala Ser Cys Ala Glu Thr Val Ile Phe Met Leu Leu Gly Ile 150 155 Ser Thr Val Asp Ser Ser Lys Trp Ala Trp Asp Ser Gly Leu Val Leu 170 175 165 Gly Thr Leu Ile Phe Ile Leu Phe Phe Arg Ala Leu Gly Val Val Leu 180 185 Gln Thr Trp Val Leu Asn Gln Phe Arg Leu Val Pro Leu Asp Lys Ile 195 200 Asp Gln Val Val Met Ser Tyr Gly Gly Leu Arg Gly Ala Val Ala Phe

	210					215					220				
Ala 225	Leu	Val	Ile	Leu	Leu 230	Asp	Arg	Thr	Lys	Val 235	Pro	Ala	Lys	Asp	Tyr 240
	Val	Ala	Thr	Thr 245		Val	Val	Val	Phe 250	Phe	Thr	Val	Ile	Val 255	
Gly	Leu	Thr	Ile 260		Pro	Leu	Val	Lys 265		Leu	Lys	Val	Lys 270	Arg	Ser
Glu	His	His 275		Pro	Thr	Leu	Asn 280	Gln	Glu	Leu	His	Glu 285		Thr	Phe
Asp	His 290	Ile	Leu	Ala	Ala	Val 295		Asp	Val	Val	Gly 300		His	Gly	Tyr
His 305	Tyr	Trp	Arg	Asp	Arg 310	Trp	Glu	Gln	Phe	Asp 315	Lys	Lys	Tyr	Leu	Ser 320
Gln	Leu	Leu	Met	Arg 325	Arg	Ser	Ala	Tyr	Arg 330	Ile	Arg	Asp	Gln	Ile 335	Trp
Asp	Val	Tyr	Tyr 340	Arg	Leu	Asn	Ile	Arg 345	Asp	Ala	Ile	Ser	Phe 350	Val	Asp
Gln	Gly	Gly 355	His	Val	Leu	Ser	Ser 360	Thr	Gly	Leu	Thr	Leu 365	Pro	Ser	Met
•	370					375					380			Leu	
385					390	_				395			_	Thr	400
				405					410					Leu 415	
			420					425					430	Ser	
		435					440				_	445		Val	
	450			_		455					460			Lys	
465					470					475				Gly	480
			_	485					490				_	Lys 495	
			500					505					510	Val	
		515					520					525		Lys	
	530					535					540			Val Pro	
545		_	_		550	_				555	_			Trp	560
				565					570					575 Thr	
			580					585					590	Ser	
		595					600					605		Leu	
	610					615					620			Pro	
625					630	_	_			635				Ser	640
				645		_			650		•			655 Pro	
	_		660			_		665				_	670	His	
J.11	J-11	675		J.11	~10	Lou	680	JLY		<b>-</b> 13	p	685	~ ^ ^ ~		

Ser Pro Gly Thr Ala Thr Ser His Trp Cys Ile Gln Phe Asn Arg Gly 690 695 700

Ser Arg Leu \* 705 707

<210> 1270 <211> 93 <212> PRT <213> Homo sapiens

<210> 1271 <211> 648 <212> PRT <213> Homo sapiens

<400> 1271 Met Leu Trp Val Thr Gly Pro Val Leu Ala Val Ile Leu Ile Leu Ile Val Ile Ala Ile Leu Leu Phe Lys Arg Lys Arg Thr His Ser Pro 25 Ser Ser Lys Asp Glu Gln Ser Ile Gly Leu Lys Asp Ser Leu Leu Ala 40 His Ser Ser Asp Pro Val Glu Met Arg Arg Leu Asn Tyr Gln Thr Pro 55 Gly Met Arg Asp His Pro Pro Ile Pro Ile Thr Asp Leu Ala Asp Asn Ile Glu Arg Leu Lys Ala Asn Asp Gly Leu Lys Phe Ser Gln Glu Tyr 90 Glu Ser Ile Asp Pro Gly Gln Gln Phe Thr Trp Glu Asn Ser Asn Leu 105 Glu Val Asn Lys Pro Lys Asn Arg Tyr Ala Asn Val Ile Ala Tyr Asp 120 His Ser Arg Val Ile Leu Thr Ser Ile Asp Gly Val Pro Gly Ser Asp 135 140 Tyr Ile Asn Ala Asn Tyr Ile Asp Gly Tyr Arg Lys Gln Asn Ala Tyr 150 155 Ile Ala Thr Gln Gly Pro Leu Pro Glu Thr Met Gly Asp Phe Trp Arg 165 170 Met Val Trp Glu Gln Arg Thr Ala Thr Val Val Met Met Thr Arg Leu

			180					185					190		
Glu	Glu	Lys 195	Ser	Arg	Val	Lys	Cys 200		Gln	Tyr	Trp	Pro 205		Arg	.Gly
Thr	Glu 210	Thr	Cys	Gly	Leu	Ile 215	Gln	Val	Thr	Leu	Leu 220	Asp	Thr	Val	Glu
225			Tyr		230					235					240
			Arg	245					250				_	255	_
			Pro 260					265					270		_
		275	Cys				280					285			
	290		Val			295					300				
305			Met		310					315					320
			Arg	325					330					335	
			Ile 340					345					350	_	
		355	Pro				360					365			
	370		Pro			375					380				_
385			Ser		390		-			395					400
			Asn	405					410					415	_
			Arg 420					425					430		
		435	Asn				440	-				445		-	
	450		Thr			455					460				_
465			Trp		470					475					480
			Met	485					490		_			495	
			Arg 500					505					510		_
		515	Gln				520					525	_		
	530		Ser Val			535					540		-	-	
545					550					555					560
			Lys	565					570			_		575	
			Ser 580				_	585		_			590		
		595	Leu -				600					605			
	610		Lys			615					620				
625			Tyr		630		Tyr	Arg	Ala	Ala 635	Leu	GLu	Tyr	Leu	Gly 640
ser	hue	Asp	His	Tyr 645	A1a	Thr 647	*								

<210> 1272 <211> 109 <212> PRT <213> Homo sapiens

<400> 1272 Met Lys Ala Leu Cys Leu Leu Leu Pro Val Leu Gly Leu Leu Val 1 5 10 Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile 20 25 Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly 40 Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser 75 70 Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met 85 90 Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro \* 105

<210> 1273 <211> 56 <212> PRT <213> Homo sapiens

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<210> 1274 <211> 188 <212> PRT <213> Homo sapiens

55 Lys Lys Glu Gly Ser Asp Arg Gln Trp Asn Tyr Ala Cys Met Pro Thr 70 Pro Gln Ser Leu Gly Glu Pro Thr Glu Cys Trp Trp Glu Glu Ile Asn 85 90 Arg Ala Gly Met Glu Trp Tyr Gln Thr Cys Ser Asn Asn Gly Leu Val 100 105 110 Ala Gly Phe Gln Ser Arg Tyr Phe Glu Ser Val Leu Asp Arg Glu Trp 115 120 125 Gln Phe Tyr Cys Cys Arg Tyr Ser Lys Arg Cys Pro Tyr Ser Cys Trp 130 135 140 Leu Thr Thr Glu Tyr Pro Gly His Tyr Gly Glu Glu Met Asp Met Ile 150 155 Ser Tyr Asn Tyr Asp Tyr Tyr Ile Arg Gly Ala Thr Thr His Phe Leu 170 165 Cys Ser Gly Lys Gly Ser Pro Ser Gly Ser Ser \* 185 187 180

<210> 1275 <211> 81 <212> PRT

<213> Homo sapiens

<400> 1275

 Met
 Val
 Ala
 Leu
 Thr
 Ile
 Gln
 Thr
 Trp
 His
 Trp
 Leu
 Met
 Thr
 Val
 Ala

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 Glu
 Leu
 Leu
 Ser
 Leu
 Ala
 Cys
 Tyr
 Ile
 Ala
 Ser
 Leu
 Val
 Phe
 Leu
 His
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<210> 1276 <211> 46 <212> PRT <213> Homo sapiens

<210> 1277

<211> 431 <212> PRT <213> Homo sapiens

<400> 1277 Met Ala Leu Leu Val Pro Leu Ala Leu Leu Val Ile Gln Ala His Leu 1 5 10 Val Leu Ser Val Gln Leu Glu Arg Val Val Thr Glu Glu Lys Val Ala 25 20 Leu Leu Ala Leu Leu Val Leu Pro Val Leu Leu Val Pro Glu Val Leu 35 40 Leu Val Leu Lys Ala His Val Val Thr Lys Val Lys Gln Val Asn Val 60 55 Glu Leu Leu Ala Ser Lys Asp Ile Glu Asp Ser Leu Val Ile Gln Val 70 Pro Gln Val Leu Gln Ala Leu Leu Val Ser Arg Val Gln Ser Ala Val 90 85 Gln Asp Leu Gln Ala Pro Glu Asp Leu Leu Asp Pro Val Asp Leu Leu 105 Ala Lys Met Glu Pro Val Asp Ile Gln Val Pro Leu Asp His Gln Gly 120 125 Leu Glu Val Thr Glu Val Lys Glu Asp Leu Arg Ala Pro Gln Ala Thr 135 140 Gln Gly Asn Gln Ala Leu Leu Asp Leu Leu Val Pro Leu Val Leu Ala 155 150 Val Val Leu Glu Pro Leu Pro Leu Gly Leu Glu Val Lys Lys 170 165 Leu Ala Gly Phe Ala Pro Tyr Tyr Gly Asp Glu Pro Met Asp Phe Lys 185 Ile Asn Thr Asp Glu Ile Met Thr Ser Leu Lys Ser Val Asn Gly Gln 200 195 Ile Glu Ser Leu Ile Ser Pro Asp Gly Ser Arg Lys Asn Pro Ala Arg 215 220 Asn Cys Arg Asp Leu Lys Phe Cys His Pro Glu Leu Lys Ser Gly Glu 235 230 Tyr Trp Val Asp Pro Asn Gln Gly Cys Lys Leu Asp Ala Ile Lys Val 250 255 245 Phe Cys Asn Met Glu Thr Gly Glu Thr Cys Ile Ser Ala Asn Pro Leu 265 260 Asn Val Pro Arg Lys His Trp Trp Thr Asp Ser Ser Ala Glu Lys Lys 280 His Val Trp Phe Gly Glu Ser Met Asp Gly Gly Phe Gln Phe Ser Tyr 300 295 Gly Asn Pro Glu Leu Pro Glu Asp Val Leu Asp Val Gln Leu Ala Phe 310 315 Leu Arg Leu Leu Ser Ser Arg Ala Ser Gln Asn Ile Thr Tyr His Cys 330 325 Lys Asn Ser Ile Ala Tyr Met Asp Gln Ala Ser Gly Asn Val Lys Lys 345 Ala Leu Lys Leu Met Gly Ser Asn Glu Gly Glu Phe Lys Ala Glu Gly 360 Asn Ser Lys Phe Thr Tyr Thr Val Leu Glu Asp Gly Cys Thr Lys His 380 375 Thr Gly Glu Trp Ser Lys Thr Val Phe Glu Tyr Arg Thr Arg Lys Ala 390 395 Val Arg Leu Pro Ile Val Asp Ile Ala Pro Tyr Asp Ile Gly Gly Pro 405 410 Asp Gln Glu Phe Gly Val Asp Val Gly Pro Val Cys Phe Leu \*

420 425 430

<210> 1278

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1278

Met Leu Leu Tyr Val Phe Lys Phe Leu Gly Leu Phe Gln Phe Phe His 1 5 10 15

Ser Phe Cys Thr Ala Tyr Gly Pro Pro Gly Gly Cys Gly Asp Ser Gly 20 25 30

Glu Glu Thr Ser Leu Phe Phe Glu Gln Leu Asp Pro Ala Phe Trp Leu 35 40

Ala Asn Cys Ser \* 50 52

<210> 1279

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1279

Met Leu Gly Ser Ile Cys Asn Val Met Leu Leu Met Leu Ala Ala Ser

1 5 10 15

Ile Pro Glu Ile Cys Thr Phe Gly Pro Thr Lys Leu Ala Ala Asn Cys
20 25 30

Asn Trp Met Pro Ser Arg Val Ala Arg Leu Pro Ser Val Arg Asp Thr
35 40 45

Val Arg Ser Pro Pro Ala Asp Thr Glu Ala Gly Arg Ile Ala Trp Pro
50 60

Thr Ser Pro Gly Cys Ser Arg Phe \* 65 70 72

<210> 1280

<211> 51

<212> PRT '

<213> Homo sapiens

<400> 1280

Met Leu Leu Leu Glu Arg Met Ala Leu Cys Pro Val Leu Asp Val 1 5 10

His Thr His Leu Gly Cys Ile Ile Cys Val Phe Asp Val Ala Leu Ser 20 25 30

Arg Glu Leu Ala Leu Cys Arg Lys Ser Asn Trp Trp Val Ile Asn 35 40 45

Trp Leu \*

50

<210> 1281 <211> 144 <212> PRT <213> Homo sapiens

<400> 1281 Met Lys Ser Gly Ser Gly Gly Gly Ser Pro Thr Ser Leu Trp Gly Leu 1 5 Leu Phe Leu Ser Ala Ala Leu Ser Leu Trp Pro Thr Ser Gly Glu Ile 25 Cys Gly Pro Gly Ile Asp Ile Arg Asn Asp Tyr Gln Gln Leu Lys Arg 40 Leu Glu Asn Cys Thr Val Ile Glu Gly Tyr Leu His Ile Leu Leu Ile 60 Ser Lys Ala Glu Asp Tyr Arg Ser Tyr Arg Phe Pro Lys Leu Thr Val 70 75 Ile Thr Glu Tyr Leu Leu Phe Arg Val Ala Gly Leu Glu Ser Leu 90 Gly Asp Leu Phe Pro Asn Leu Thr Val Ile Arg Gly Trp Lys Leu Phe 105 Tyr Asn Tyr Ala Leu Val Ile Phe Glu Met Thr Asn Leu Lys Asp Ile 115 120 Gly Leu Tyr Asn Leu Arg Asn Ile Thr Arg Gly Gly His Gln Asp \* 135 140 143

<210> 1282 <211> 267 <212> PRT <213> Homo sapiens

<400> 1282 Met Gly Pro Pro Ser Ala Cys Pro His Arg Glu Cys Ile Pro Trp Gln Gly Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Ala Pro Thr 20 25 Thr Ala Trp Leu Phe Ile Ala Ser Ala Pro Phe Glu Val Ala Glu Gly 35 40 45 Glu Asn Val His Leu Ser Val Val Tyr Leu Pro Glu Asn Leu Tyr Ser 55 60 Tyr Gly Trp Tyr Lys Gly Lys Thr Val Glu Pro Asn Gln Leu Ile Ala 70 Ala Tyr Val Ile Asp Asp Thr His Val Arg Thr Pro Gly Pro Ala Tyr 85 · 90 Ser Gly Arg Glu Thr Ile Ser Pro Ser Gly Asp Leu His Phe Gln Asn 105 100 Val Thr Leu Glu Asp Thr Gly Tyr Tyr Asn Leu Gln Val Thr Tyr Arg 120 125 Asn Ser Gln Ile Glu Gln Ala Ser His His Leu Arg Val Tyr Gln Val 135 140 Ser Gly Leu Thr Pro Pro Ser Lys Pro Ala Ala Pro Gln Ser Pro Arg 150 155 Arg Ala Pro Gly Val Leu Thr Cys His Thr Asn Asn Thr Gly Thr Ser 165 170 Phe Gln Trp Ile Phe Asn Asn Gln Arg Leu Gln Val Thr Lys Arg Met

<210> 1283 <211> 262 <212> PRT <213> Homo sapiens

<400> 1283 Met Leu Val Leu Val Leu Arg Val Ser Leu Ala Ala Leu Val Lys 5 10 Met Glu Leu Val Arg Trp Ala Pro Val Ala Cys Leu Val Arg Glu 25 Val Ala Leu Glu Pro Leu Ala Leu Leu Val Leu Val Glu Met Met Val 40 Leu Leu Val Leu Pro Gly Pro Leu Val Pro Pro Ala Pro Leu Val Leu Leu Ala Ser Leu Val Leu Leu Val Leu Arg Val Lys Leu Val Pro Lys 70 75 Gly Pro Glu Ala Leu Lys Val Pro Arg Val Cys Val Val Ser Leu Ala 85 90 Pro Leu Ala Leu Leu Val Leu Leu Ala Leu Leu Glu Thr Leu Val Leu 105 Arg Glu Ser Leu Val Leu Lys Val Pro Met Val Leu Leu Val Leu Leu 115 120 Val Leu Leu Ala Ser Leu Val Pro Glu Ala Pro Leu Asp Pro Arg Ala 135 140 Pro Ala Ala Leu Leu Val Pro Arg Val Thr Ala Val Asn Leu Val Leu 150 155 160 Leu Ala Ala Lys Glu Thr Leu Val Leu Arg Glu Ser Leu Ala Leu Leu 170 Val Phe Lys Asp Pro Leu Ala Leu Leu Glu Arg Lys Glu Ser Glu Glu 180 185 Leu Glu Val Asn Pro Asp Pro Leu Ala Cys Pro Asp Pro Leu Ala Ser 195 200 205 Val Val Asp Leu Val Ala Val Val Ser Leu Ala Gln Met Val Leu Leu 215 220 Val Pro Arg Val Pro Leu Val Asn Val Val Leu Leu Ala Leu Leu Ala 230 235 Pro Lys Asp Leu Leu Val Lys Leu Val Val Pro Val Lys Leu Val Cys 250 Leu Val Pro Arg Val \* 260 261

<210> 1284

<211> 50 <212> PRT <213> Homo sapiens

<210> 1285 <211> 323 <212> PRT <213> Homo sapiens

<400> 1285 Met Leu Val Met Ala Pro Arg Thr Val Leu Leu Leu Ser Ala Ala 5 10 Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe 20 25 Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ser 40 Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala 55 60 Ala Ser Pro Arg Glu Glu Pro Arg Ala Pro Trp Ile Glu Glu Gly 70 Pro Glu Tyr Trp Asp Arg Asn Thr Gln Ile Tyr Lys Ala Gln Ala Gln 85 90 Thr Asp Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Gln Ser 105 Glu Ala Gly Ser His Thr Leu Gln Ser Met Tyr Gly Cys Asp Val Gly 115 120 Pro Asp Gly Arg Leu Leu Arg Gly His Asp Gln Tyr Ala Tyr Asp Gly 140 135 Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala 150 155 160 Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Trp Glu Ala Ala Arg Glu 165 170 Ala Glu Gln Arg Arg Ala Tyr Leu Glu Gly Glu Cys Val Glu Trp Leu 180 185 Arg Arg Tyr Leu Glu Asn Gly Lys Asp Lys Leu Glu Arg Ala Asp Pro 200 205 Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu Ala Thr 210 215 220 Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr 230 235 Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu 245 250 Thr Arg Pro Ala Gly Asp Arg Thr Phe Gln Lys Val Gly Gln Leu Trp 265

Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His

<210> 1286 <211> 306 <212> PRT <213> Homo sapiens

<400> 1286 Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu 10 Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Met Pro 25 Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro Gly Arg Asp Gly Arg Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly 55 Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln 70 75 Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly 100 105 Val Pro Gly Pro Ala Gly Arg Glu Gly Pro Leu Gly Lys Gln Gly Asn 120 125 Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys 135 140 Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly 150 155 Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val 170 Pro Gly Asn Thr Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln 180 185 190 Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly 200 Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val 215 220 Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His 230 Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn 245 250 Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys 265 Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gly Gln Leu 280 Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Pro Leu Ala Thr Ala Gly 295 Pro \* 305

<210> 1287 <211> 299 <212> PRT <213> Homo sapiens

<400> 1287 Met Gly Arg Trp Ala Leu Asp Val Ala Phe Leu Trp Lys Ala Val Leu 1 5 10 Thr Leu Gly Leu Val Leu Leu Tyr Tyr Cys Phe Ser Ile Gly Ile Thr 20 25 Phe Tyr Asn Lys Trp Leu Thr Lys Ser Phe His Phe Pro Leu Phe Met 40 Thr Met Leu His Leu Ala Val Ile Phe Leu Phe Ser Ala Leu Ser Arg 55 60 Ala Leu Val Gln Cys Ser Ser His Arg Ala Arg Val Val Leu Ser Trp 75 Ala Asp Tyr Leu Arg Arg Val Ala Pro Thr Ala Leu Ala Thr Ala Leu Asp Val Gly Leu Ser Asn Trp Ser Phe Leu Tyr Val Thr Val Ser Leu 100 105 110 Tyr Thr Met Thr Lys Ser Ser Ala Val Leu Phe Ile Leu Ile Phe Ser 120 \_ 125 Leu Ile Phe Lys Leu Glu Glu Leu Arg Ala Ala Leu Val Leu Val Val 135 140 Leu Leu Ile Ala Gly Gly Leu Phe Met Phe Thr Tyr Lys Ser Thr Gln 155 150 Phe Asn Val Glu Gly Phe Ala Leu Val Leu Gly Ala Ser Phe Ile Gly 165 170 Gly Ile Arg Trp Thr Leu Thr Gln Met Leu Leu Gln Lys Ala Glu Leu 185 180 Gly Leu Gln Asn Pro Ile Asp Thr Met Phe His Leu Gln Pro Leu Met 200 Phe Leu Gly Leu Phe Pro Leu Phe Ala Val Phe Glu Gly Leu His Leu 215 220 Ser Thr Ser Glu Lys Ile Phe Arg Phe Gln Gly His Arg Ala Ala Pro 230 235 Ala Gly Thr Trp Gly Ala Ser Ser Leu Ala Gly Phe Ser Pro Leu Val 245 250 Trp Ala Ser Leu Ser Ser Ser Trp Ser Pro Glu Pro Pro Ala Ser Leu 265 270 Ser Pro Leu Pro Ala Phe Leu Arg Lys Ser Ala Leu Cys Cys Trp Gln 275 280 Leu Ile Cys Trp Ala Ile Arg Ser Ala Ser \* 295

<210> 1288 <211> 161 <212> PRT <213> Homo sapiens

25 Ala Leu Arg Val Trp Gly Val Gly Asn Glu Ala Gly Val Gly Pro Gly 40 Leu Gly Glu Trp Ala Val Val Thr Gly Ser Thr Asp Gly Ile Gly Lys Ser Tyr Ala Glu Glu Leu Ala Lys His Gly Met Lys Val Val Leu Ile 70 Ser Arg Ser Lys Asp Lys Leu Asp Gln Val Ser Ser Glu Ile Lys Glu 85 90 Lys Phe Lys Val Glu Thr Arg Thr Ile Ala Val Asp Phe Ala Ser Glu 100 105 110 Asp Ile Tyr Asp Lys Ile Lys Thr Gly Leu Ala Gly Leu Glu Ile Gly 125 115 120 Ile Leu Val Asn Asn Val Gly Met Ser Tyr Glu Tyr Pro Glu Tyr Phe 135 140 Leu Asp Val Pro Asp Leu Asp Asn Val Ile Lys Lys Asn Asp Lys Tyr

<210> 1289

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1289

<210> 1290

<211> 453

<212> PRT

<213> Homo sapiens

<400> 1290

Met Thr Ser Lys Phe Ile Leu Val Ser Phe Ile Leu Ala Ala Leu Ser 10 Leu Ser Thr Thr Phe Ser Leu Gln Pro Asp Gln Gln Lys Val Leu Leu 20 25 Val Ser Phe Asp Gly Phe Arg Trp Asp Tyr Leu Tyr Lys Val Pro Thr 40 Pro His Phe His Tyr Ile Met Lys Tyr Gly Val His Val Lys Gln Val 55 Thr Asn Val Phe Ile Thr Lys Thr Tyr Pro Asn His Tyr Thr Leu Val 70 Thr Gly Leu Phe Ala Glu Asn His Gly Ile Val Ala Asn Asp Met Phe 8.5 90 Asp Pro Ile Arg Asn Lys Ser Phe Ser Leu Asp His Met Asn Ile Tyr 105

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Asp Ser Lys Phe Trp Glu Glu Ala Thr Pro Ile Trp Ile Thr Asn Gln
 115 120
Arg Ala Gly His Thr Ser Gly Ala Ala Met Trp Pro Gly Thr Asp Val
                    135
Lys Ile His Lys Arg Phe Pro Thr His Tyr Met Pro Tyr Asn Glu Ser
              150
                                 155
Val Ser Phe Glu Asp Arg Val Ala Lys Ile Ile Glu Trp Phe Thr Ser
Lys Glu Pro Ile Asn Leu Gly Leu Leu Tyr Trp Glu Asp Pro Asp Asp
                        185
Met Gly His His Leu Gly Pro Asp Ser Pro Leu Met Gly Pro Val Ile
      195 200 205
Ser Asp Ile Asp Lys Lys Leu Gly Tyr Leu Ile Gln Met Leu Lys Lys
                   215
                                     220
Ala Lys Leu Trp Asn Thr Leu Asn Leu Ile Ile Thr Ser Asp His Gly
        230 235
Met Thr Gln Cys Ser Glu Glu Arg Leu Ile Glu Leu Asp Gln Tyr Leu
             245
                              250
Asp Lys Asp His Tyr Thr Leu Ile Asp Gln Ser Pro Val Ala Ala Ile
                           265
Leu Pro Lys Glu Gly Lys Phe Asp Glu Val Tyr Glu Ala Leu Thr His
      275
                        280
Ala His Pro Asn Leu Thr Val Tyr Lys Lys Glu Asp Val Pro Glu Arg
  290 295
                                      300
Trp His Tyr Lys Tyr Asn Ser Arg Ile Gln Pro Ile Ile Ala Val Ala
                310
                        315
Asp Glu Gly Trp His Ile Leu Gln Asn Lys Ser Asp Asp Phe Leu Leu
             325
                               330
Gly Asn His Gly Tyr His Asn Ala Leu Ala Asp Met His Pro Ile Phe
          340
                          345
Leu Ala His Gly Pro Ala Phe Arg Lys Asn Phe Ser Lys Glu Ala Met
                              365
     355 · 360
Asn Ser Thr Asp Leu Tyr Pro Leu Leu Cys His Leu Leu Asn Ile Thr
                    375
                             380
Ala Met Pro His Asn Gly Ser Phe Trp Asn Val Gln Asp Leu Leu Asn
                390
                                395
Ser Ala Met Pro Arg Val Val Pro Tyr Thr Gln Ser Thr Ile Leu Leu
             405
                               410
Pro Gly Ser Val Lys Pro Ala Glu Tyr Asp Gln Glu Gly Ser Tyr Pro
         420 425
                                   430
Tyr Phe Ile Gly Val Ser Leu Gly Ser Ile Ile Val Ile Val Phe Phe
     435
                       440
Cys Asn Phe His *
   450 452
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<210> 1291

<211> 78

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(78)

<223> Xaa = any amino acid or nothing
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<400> 1291
Met Leu Ser Val Thr Ala Phe Ile Leu Ala Glu Thr Val Leu Ala Ser

<210> 1292 <211> 416 <212> PRT <213> Homo sapiens

<400> 1292

Met Val Leu Trp Ile Leu Trp Arg Pro Phe Gly Phe Ser Gly Arg Phe 10 Leu Lys Leu Glu Ser His Ser Ile Thr Glu Ser Lys Ser Leu Ile Pro 20 25 Val Ala Trp Thr Ser Leu Thr Gln Met Leu Leu Glu Ala Pro Gly Ile 40 Phe Leu Leu Gly Gln Arg Lys Arg Phe Ser Thr Met Pro Glu Thr Glu 55 Thr His Glu Arg Glu Thr Glu Leu Phe Ser Pro Pro Ser Asp Val Arg 70 75 Gly Met Thr Lys Leu Asp Arg Thr Ala Phe Lys Lys Thr Val Asn Ile 90 Pro Val Leu Lys Val Arg Lys Glu Ile Val Ser Lys Leu Met Arg Ser 100 105 Leu Lys Arg Ala Ala Leu Gln Arg Pro Gly Ile Arg Arg Val Ile Glu 120 Asp Pro Glu Asp Lys Glu Ser Arg Leu Ile Met Leu Asp Pro Tyr Lys 135 140 Ile Phe Thr His Asp Ser Phe Glu Lys Ala Glu Leu Ser Val Leu Glu 150 155 Gln Leu Asn Val Ser Pro Gln Ile Ser Lys Tyr Asn Leu Glu Leu Thr 165 170 Tyr Glu His Phe Lys Ser Glu Glu Ile Leu Arg Ala Val Leu Pro Glu 180 185 Gly Gln Asp Val Thr Ser Gly Phe Ser Arg Ile Gly His Ile Ala His 200 205 Leu Asn Leu Arg Asp His Gln Leu Pro Phe Lys His Leu Ile Gly Gln 215 220 Val Met Ile Asp Lys Asn Pro Gly Ile Thr Ser Ala Val Asn Lys Ile 235 Asn Asn Ile Asp Asn Met Tyr Arg Asn Phe Gln Met Glu Val Leu Ser 245 250 Gly Glu Gln Asn Met Met Thr Lys Val Arg Glu Asn Asn Tyr Thr Tyr 265 Glu Phe Asp Phe Ser Lys Val Tyr Trp Asn Pro Arg Leu Ser Thr Glu 275 280 His Ser Arg Ile Thr Glu Leu Leu Lys Pro Gly Asp Val Leu Phe Asp 295 300 Val Phe Ala Gly Val Gly Pro Phe Ala Ile Pro Val Ala Lys Lys Asn 310

<210> 1293

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1293

Met Val Arg Pro Leu Leu Leu Leu Asn Leu His Phe His Leu Pro Ser 1 5 10 Leu Val Ser Leu Ser Leu Leu Leu Ser Val Ser Leu Ser Leu 20 25 Val Asn Ala Val Arg Leu Leu Arg Ala Ser Phe Cys Ser Trp Leu Ile 35 40 45 Ala Lys Ser Leu Ile Thr Leu Trp Val Arg Pro Ser Gln Ile Gly Lys 50 55 Leu Lys Ala Leu Ala Ser Ser Thr Thr Ser Met Ala Trp Glu Gly Leu 75 Leu Asp Thr Phe Ala Leu Ser Ile Ser Ser Phe Ser Asn Ser Leu Leu 85 90 Gly Ile Leu Leu Cys Phe Leu Lys Ser Pro Asn Ile Phe Gln Ala Ser 105 110 112

<210> 1294

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1294

Met Asp Phe Leu Met Leu Ala Val Cys Ala His Arg Leu Cys Phe Leu 1 5 10 15

Tyr Leu Phe Ile Leu Tyr Glu Ser Lys Asn Lys Arg Glu Cys Glu Gln 20 25 30

Phe Arg Arg Leu Gln Ile Tyr Leu Val Arg Leu Leu Ser Lys Arg Phe 35 40 45

Pro Val Val Val Ile Pro Ala Val \*

<210> 1295 <211> 68 <212> PRT <213> Homo sapiens <400> 1295 Met Phe Leu Ser Leu Cys Leu Leu Ser Ala Ala Leu Thr Lys Ile Ser 10 Ser Lys Ile Leu Tyr Lys Pro Gly Thr Lys Val Thr Ser Leu Gln Phe 25 Ile Pro Thr Ser Ser Ser Tyr Thr His Met Asn Cys Val Asn Gly Ser 40 Thr Asp Pro Ile Tyr Val Ser Gly Arg Arg Arg Met Cys Ser Ser Cys 50 *•* 55 Val Phe Ile \* 65 67 <210> 1296 <211> 66 <212> PRT <213> Homo sapiens <400> 1296 Met Trp Ser Ala His Pro Leu Ala Val Leu Ser Leu Lys Leu Thr Leu 5 10 Phe Ser Leu Thr Ser Asp Trp Leu Ser Ser Lys Asp Met Ala Ile Ser Leu Ala Phe Lys Ile Ser Gln Ile Leu Cys Ser Val Leu Ser Ala Pro 40 Gly Lys Arg Leu Ile Ser Val Leu Trp Asn Thr Ser Ser Leu Lys Arg 50 55 Ser \* 65 <210> 1297 <211> 57 <212> PRT <213> Homo sapiens <400> 1297 Met Leu His Ser Gln Leu Leu Ala Val Ser Phe Arg Leu Ile Val Thr 5 Leu Pro Leu Ser Ile Gln Asp Trp Asp Asp Ala Glu Asn Met Lys Gly 20 25 Leu Gln Tyr Ile Phe Asn Thr Leu Trp Ser Val Ser Ser Pro Val Ile 35 40

<210> 1298

Thr Ser Ile Leu Ser Ser Lys His \*

<211> 235 <212> PRT <213> Homo sapiens

<400> 1298 Met Arg Lys Thr Arg Leu Trp Gly Leu Leu Trp Met Leu Phe Val Ser 10 Glu Leu Arg Ala Ala Thr Lys Leu Thr Glu Glu Lys Tyr Glu Leu Lys 25 Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe 40 Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val 70 Gln Val Gly Arg Ile Ile Leu Glu Asp Tyr His Asp His Gly Leu Leu 85 90 95 Arg Val Arg Met Val Asn Leu Gln Val Glu Asp Ser Gly Leu Tyr Gln 100 105 110 Cys Val Ile Tyr Gln Pro Pro Lys Glu Pro His Met Leu Phe Asp Arg 115 120 125 Ile Arg Leu Val Val Thr Lys Gly Phe Ser Gly Thr Pro Gly Ser Asn 135 Glu Asn Ser Thr Gln Asn Val Tyr Lys Ile Pro Pro Thr Thr Lys 145 150 155 Ala Leu Cys Pro Leu Tyr Thr Thr Pro Arg Thr Val Thr Gln Ala Pro 165 170 175 Pro Lys Ser Thr Ala Asp Val Ser Thr Pro Asp Ser Glu Ile Asn Leu 180 185 190 Thr Asn Val Thr Asp Ile Ile Arg Val Pro Val Phe Asn Ile Val Ile 205 200 Leu Leu Ala Gly Gly Phe Leu Ser Lys Ser Leu Val Phe Ser Val Leu 215 Phe Ala Val Thr Leu Arg Ser Phe Val Pro \* 230 234

<210> 1299

<211> 64

<212> PRT

<213> Homo sapiens

55

<210> 1300 <211> 80

<212> PRT <213> Homo sapiens

70

<210> 1301 <211> 87 <212> PRT <213> Homo sapiens

<400> 1301 Met Arg Phe Arg Ala Glu Pro Lys Ser Arg Pro Leu Pro Ala Leu Cys 5 10 His Val Leu Ile Ala Cys Ile Val Phe Arg Trp Ala Phe Ala Gln Pro 20 25 Leu Pro Ser Ser Arg Ser Tyr Arg Ser Ser Gly Glu Phe Pro Arg Ser 40 Pro Ser Phe Lys Lys Thr Lys Thr Pro Ser Trp Gly Glu Arg Arg Val 55 60 Leu Leu Tyr Ser Arg Met Leu Arg Ala Asn Leu Arg Met Trp Arg Glu 70 Tyr Trp Ser Gln Lys Ser Ile 85

<210> 1302 <211> 143 <212> PRT <213> Homo sapiens

<210> 1303 <211> 60 <212> PRT <213> Homo sapiens

<210> 1304 <211> 56 <212> PRT <213> Homo sapiens

<210> 1305 <211> 63 <212> PRT <213> Homo sapiens

50 55 60 62

<210> 1306 <211> 138 <212> PRT <213> Homo sapiens

<400> 1306 Met Gln Asn Arg Thr Gly Leu Ile Leu Cys Ala Leu Ala Leu Leu Met 10 Gly Phe Leu Met Val Cys Leu Gly Ala Phe Phe Ile Ser Trp Gly Ser Ile Phe Asp Cys Gln Gly Ser Leu Ile Ala Ala Tyr Leu Leu Leu Pro 40 Leu Gly Phe Val Ile Leu Leu Ser Gly Ile Phe Trp Ser Asn Tyr Arg 55 Gln Val Thr Glu Ser Lys Gly Val Leu Arg His Met Leu Arg Gln His 70 75 Leu Ala His Gly Ala Leu Pro Val Ala Thr Val Asp Arg Pro Asp Phe 90 Tyr Pro Pro Ala Tyr Glu Glu Ser Leu Glu Val Glu Lys Gln Ser Cys 105 Pro Ala Glu Arg Glu Ala Pro Arg His Ser Ser Thr Ser Ile Tyr Arg 120 Asp Gly Pro Gly Ile Pro Gly Trp Lys \*

135 137

<210> 1307 <211> 64 <212> PRT <213> Homo sapiens

130

<210> 1308 <211> 65 <212> PRT <213> Homo sapiens

<400> 1308

 Met
 Pro
 Cys
 Ser
 Gly
 Ser
 Val
 Gln
 Thr
 Phe
 Arg
 Pro
 Leu
 Leu
 Leu
 Ile

 Phe
 His
 Asn
 Val
 Thr
 Phe
 Phe
 Phe
 Ile
 Pro
 Val
 Lys
 Cys
 Phe
 Asn
 Ala

 Leu
 Ile
 Asn
 Val
 Leu
 Glu
 Arg
 Pro
 Phe
 Trp
 Gln
 Leu
 Leu
 Gly
 Glu
 Ile

 Gly
 Glu
 Glu
 Arg
 Pro
 Phe
 Trp
 Leu
 Gly
 Ser
 Phe
 Arg

 Gly
 Glu
 Trp
 Leu
 Gly
 Ser
 Phe
 Arg

 50
 55
 60
 64
 64

<210> 1309

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1309

<210> 1310

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1310

<210> 1311

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1311

Met Tyr Trp Val Thr Val Ile Thr Leu Ile Tyr Gly Tyr Tyr Ala Trp

1 5 10 15

Val Gly Phe Trp Pro Glu Ser Ile Pro Tyr Gln Asn Leu Gly Pro Leu

<210> 1312 . <211> 114 <212> PRT <213> Homo sapiens

<400> 1312 Met Lys Gly Lys Trp Cys Cys Ser Leu Leu Cys Gln Ser Pro Gln Val 10 Gln Thr Ala Leu Val Cys Pro Leu Ser Leu Ser Leu Gly Pro Pro Gly 20 25 Pro Gln Cys Pro Leu Leu Trp Leu Gly Gln Glu Asp Leu Pro Asp Ile 35 40 Ala Arg Cys Ile Thr Asp Asp Cys Ser Gln Leu Pro Gln Ala Pro Ala 55 60 Ser Leu Ala Ser Cys Phe Phe Pro Gln Ser Cys Leu Leu Ile Ser Ile 70 75 His Leu Ser Met Gly Tyr Ser Trp Thr Leu Gly Leu Gly Val Gly Ile 85 90 Arg Leu Leu Pro Thr Lys Gly Val Lys Val Thr His Phe Pro Tyr His 105 Ala \*

<210> 1313 <211> 88 <212> PRT <213> Homo sapiens

113

<210> 1314 <211> 65 <212> PRT <213> Homo sapiens

<210> 1315 <211> 71 <212> PRT <213> Homo sapiens

<210> 1316 <211> 114 <212> PRT <213> Homo sapiens

70 Gly Leu Ala Ala Leu Pro Gly Ser Gly Ala Phe Ser Val Ile Pro Val 85 90 Ser Leu Leu Pro Val Pro Glu Gly Leu Gly Arg Thr Tyr Leu Tyr 105 Ser \* 113

<210> 1317 <211> 91 <212> PRT <213> Homo sapiens

<400> 1317 Met Met Val Trp Asn Leu Phe Pro Cys Phe Pro Pro Leu Leu Leu 10 Gln Phe Ile Asp Cys Gln Gln Ser Ser Glu Ile Glu Gln Gly Phe Thr 20 25 Arg Ser Leu Leu Gly His Pro Ile Phe Phe Cys Pro Asp Pro Cys Trp 40 Gln Ser Cys Met Asn Cys Val Ile Leu Leu Ser Ala Phe Phe Leu Phe Asp Lys Met Asp Ile Lys Asn Ser Cys Cys Ala Lys Val Ser Ser 70 75 Leu Leu Gln Glu Glu Asn Gln Phe Phe \* 85

<210> 1318 <211> 65 <212> PRT <213> Homo sapiens

<400> 1318 Met Leu Pro Leu Ile Ser Ser Ile Lys Ile Leu Lys Leu Leu Tyr Tyr Phe Ser Val Trp Gly Trp Gly Phe Phe Phe Glu Thr Glu Phe Arg 25 Ser Cys Cys Pro Gly Trp Ser Ala Met Val Arg Ser Gln Leu Thr Ala 40 45 Thr Ser Thr Ser Arg Val Gln Ala Ile Leu Leu Pro Gln Pro Pro Glu 60

<210> 1319 <211> 46 <212> PRT <213> Homo sapiens

<400> 1319

<210> 1320 <211> 47 <212> PRT

<213> Homo sapiens

<400> 1320

<210> 1321 <211> 55 <212> PRT

<213> Homo sapiens

<210> 1322 <211> 301 <212> PRT <213> Homo sapiens

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70
Phe Ser Thr Arg Ser Asn Tyr Asp Gly Ile Leu Pro Gln Thr Phe Ala
            85
                             90
Gln Val Asn Asn Leu Leu Gln Thr Phe Ala Glu Val Lys Thr Lys Leu
                        105
Lys Pro Asn Ser Ser Glu Asn Thr Val Thr Lys Lys Gln Glu Gly Thr
            120
Ser Leu Lys Asn Ser His Asn Gln Glu Ile Thr Val Phe Ser Ser Ser
                  135
His Leu Pro Gln Pro Ser Arg His Gln Glu Ile Trp Ser Ile Leu Glu
      150
                    155
Ser Val Trp Ile Thr Ile Tyr Gln Asn Ser Thr Asp Val Phe Gln Arg
      165 170
Leu Gly Ser Asn Ser Ala Leu Thr Thr Ser Asn Ile Ala Ser Phe Glu
         180 185 190
Glu Ala Phe Ile Cys Leu Gln Lys Leu Met Ala Ala Val Arg Asp Ile
            200 205
Leu Glu Gly Ile Gln Arg Ile Leu Ala Pro Asn Ser Asn Tyr Gln Asp
                  215
                          220
Val Glu Thr Leu Tyr Asn Phe Leu Ile Lys Tyr Glu Val Asn Lys Asn
                       235
Val Lys Phe Thr Ala Gln Glu Ile Tyr Asp Cys Val Ser Gln Thr Glu
            245
                            250
Tyr Arg Glu Lys Leu Thr Ile Gly Cys Arg Gln Leu Val Glu Met Glu
         260
                         265
Tyr Thr Met Gln Gln Cys Asn Ala Ser Val Tyr Met Glu Ala Lys Asn
     275 . 280 285
Arg Gly Trp Cys Glu Asp Met Leu Asn Tyr Arg Ile *
                   295
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<210> 1323 <211> 85

<212> PRT <213> Homo sapiens

<400> 1323

<210> 1324

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1324 Met Leu His His Ser Gln Leu Ile Phe Val Phe Leu Val Gln Thr Gly 10 Phe His His Val Ala Leu Ser Gly Phe Lys Leu Leu Ala Ser Ser Asn 25 Leu Pro Thr Leu Asp Pro Lys Val Leu Gly Leu Gln Val \* 40 <210> 1325 <211> 87 <212> PRT <213> Homo sapiens <400> 1325 Met Gly Leu Ser Lys Ala Phe Leu Ile Thr Arg Thr Val Phe Leu Ile 1 5 10 Ser Ser Leu Ser Phe Tyr Ser Phe Leu Gly Phe Pro Ser Leu Cys Phe 20 25 Thr Gly Ser Cys Met Leu Ser Thr Leu Phe Ile Arg Ala Leu Ser Ile 35 40 45 Leu Val Ile Ile Val Leu Asn Ser Arg Ser Asp Lys Ser Asn Thr Pro 55 60 Ala Ile Ser Glu Ser Gly Ser Asp Ala Cys Ser Phe Ser Ser Asn Phe 65 70 Val Phe Cys Leu Leu Val \* . 85 86 <210> 1326 <211> 69 · <212> PRT <213> Homo sapiens <400> 1326 Met Ser Leu Phe Leu Phe Deu Met Phe Gln Val Leu Ser Glu Val 5 10 Ser Trp Gly Gly Val Gly Ser Val Ser Asn Gln Gly Leu Glu His His 25 Glu Ile Val Thr Pro Asp Leu Gln Ser Leu Ala Gly Gly Trp Thr Gly 35 40 45 Gly Arg Glu Arg Gly Phe Leu Phe Thr Phe Asn Ile Phe Leu Gln Lys 50 55 Lys Gln Thr Ile \* 65 68 <210> 1327

<211> 103 <212> PRT <213> Homo sapiens <221> misc feature

<222> (1)...(103) <223> Xaa = any amino acid or nothing

<400> 1327 Met Val Gly Phe Gly Thr Asn Arg Arg Ala Gly Arg Leu Pro Ser Leu . 5 10 Val Leu Val Val Leu Leu Val Val Ile Val Val Leu Ala Phe Asn Tyr 25 Trp Ser Ile Ser Ser Arg His Val Leu Leu Glu Glu Glu Val Ala Glu 35 40 Leu Gln Gly Arg Val Gln Arg Ala Glu Val Ala Leu Trp Arg Val Gly 55 60 Gly Arg Asn Cys Asp Leu Leu Leu Val Val Gly Thr Arg Ser Arg Arg 70 75 Ile Glu Glu Arg Gly Ala Asp Tyr Ser Arg Leu Ser Arg Arg Leu Gln 85 90

Xaa Lys Glu Gly Leu Val Asn 100 103

> <210> 1328 <211> 52 <212> PRT <213> Homo sapiens

20 25 30

Ile Pro Lys Ser Arg Ile Tyr Leu Gln Glu Ala Lys Gly Ser Gly Glu
35 40 45

Pro Leu Gly \* 50 51

<210> 1329 <211> 204 <212> PRT <213> Homo sapiens

Glu Leu Thr Asn Gln Val Leu Glu Met Arg Gly Thr Ala Ala Gly Met 105 Asp Leu Trp Val Thr Phe Glu Ile Arg Glu His Gly Glu Leu Glu Arg 120 Pro Leu His Pro Lys Glu Lys Val Leu Glu Gln Ala Leu Gln Trp Cys 135 140 Gln Leu Pro Glu Pro Cys Ser Ala Ser Leu Leu Leu Lys Lys Val Pro 150 155 Leu Ala Gln Ala Gly Cys Leu Phe Thr Gly Ile Arg Arg Glu Ser Pro 170 165 Arg Val Gly Leu Phe Ala Val Phe Val Arg Ser His Leu Ala Cys Trp 185 180 Gly Ser Arg Phe Gln Glu Arg Phe Phe Leu Val Ala 200

<210> 1330 <211> 199 <212> PRT <213> Homo sapiens

<400> 1330 Met Pro Val Pro Ala Leu Cys Leu Leu Trp Ala Leu Ala Met Val Thr 1 5 10 Arg Pro Ala Ser Ala Ala Pro Met Gly Gly Pro Glu Leu Ala Gln His 20 25 Glu Glu Leu Thr Leu Leu Phe His Gly Thr Leu Gln Leu Gly Gln Ala 35 40 Leu Asn Gly Val Tyr Arg Thr Thr Glu Gly Arg Leu Thr Lys Ala Arg 55 Asn Ser Leu Gly Leu Tyr Gly Arg Thr Ile Glu Leu Leu Gly Gln Glu 75 Val Ser Arg Gly Arg Asp Ala Ala Gln Glu Leu Arg Ala Ser Leu Leu 90 Glu Thr Gln Met Glu Glu Asp Ile Leu Gln Leu Gln Ala Glu Ala Thr 105 Ala Glu Val Leu Gly Glu Val Ala Gln Ala Gln Lys Val Leu Arg Asp 120 125 Ser Val Gln Arg Leu Glu Val Gln Leu Arg Ser Ala Trp Leu Gly Pro 135 140 Ala Tyr Arg Glu Phe Glu Val Leu Lys Ala His Ala Asp Lys Gln Ser 150 155 His Ile Leu Trp Ala Leu Thr Gly His Val Gln Arg Gln Arg Glu 165 170 Met Val Ala Gln Gln His Arg Leu Arg Gln Ile Gln Glu Arg Leu His 180 185 Thr Ala Ala Leu Pro Ala \*

<210> 1331 <211> 81 <212> PRT <213> Homo sapiens

198

<210> 1332

<211> 73

<212> PRT

<213> Homo sapiens

<221> misc\_feature

<222> (1)...(73)

<223> Xaa = any amino acid or nothing

70

<400> 1332

 Met Thr Ile Ile Leu Gln Ile Glu Thr Val Ile Phe Leu Leu Tyr Leu

 1
 5
 10
 15

 Ala Pro Asp Thr Val Arg Pro Leu Thr Ile Ile Thr Gly Met Ala Gly
 20
 25
 30

 Ile Val Lys Gln Gln Ile Asp Ser His Ile Thr Asp Pro Asp Gln Gln
 45

 Asn Asn Gly Leu Ser Leu Ser Gly Pro Pro Pro Ala Pro Asp Pro Leu
 50
 55

 Asp Xaa Leu Val Pro Thr Leu Trp Gly

<210> 1333

<211> 52

<212> PRT

<213> Homo sapiens

<400> 1333

 Met Leu Val Tyr
 Ile Leu Trp Asn Met Tyr Phe Asn Val Cys Ile Val

 1
 5
 10
 15

 Pro Gly Val Ile Lys Ser Lys Thr Gly Thr Gln Asp Leu Ser Gly Leu
 20
 25
 30

 Trp Pro Leu Gly Thr Phe Pro Leu Ile Thr Phe Leu Pro Thr Trp Leu
 35
 40
 45

 Ser Tyr Gly \*
 50
 51

<210> 1334

<211> 65 <212> PRT <213> Homo sapiens

<210> 1335 <211> 112 <212> PRT <213> Homo sapiens

<400> 1335 Met Leu His Pro Glu Thr Ser Pro Gly Arg Gly His Leu Leu Ala Val 1 5 10 Leu Leu Ala Leu Leu Gly Thr Ala Trp Ala Glu Val Trp Pro Pro Gln 25 Leu Gln Glu Gln Ala Pro Met Ala Gly Ala Leu Asn Arg Lys Glu Ser 40 Phe Leu Leu Ser Leu His Asn Arg Leu Arg Ser Trp Val Gln Pro 55 60 Pro Ala Ala Asp Met Arg Arg Leu Asp Trp Ser Asp Ser Leu Ala Gln 70 75 Leu Ala Gln Ala Arg Ala Ala Leu Cys Gly Ile Pro Thr Pro Ser Leu 90 Ala Ser Gly Leu Trp Arg Thr Leu Gln Val Gly Trp Asn Met Gln Leu 100 105

<210> 1336 <211> 105 <212> PRT <213> Homo sapiens

<210> 1337 <211> 57 <212> PRT <213> Homo sapiens

<210> 1338 <211> 59 <212> PRT <213> Homo sapiens

<210> 1339 <211> 50 <212> PRT <213> Homo sapiens

Tyr \*

<210> 1340

<211> 81

<212> PRT

<213> Homo sapiens

<400> 1340

 Met
 Pro
 Leu
 Ala
 Cys
 Thr
 Gly
 Leu
 Asn
 Thr
 Gln
 Arg
 Phe
 Ser
 Tyr
 Leu
 15

 Arg
 Asp
 Leu
 Phe
 Leu
 Pro
 Trp
 Gly
 Leu
 Cys
 Ile
 Leu
 Tyr
 Ser
 Leu
 Leu
 Tyr
 Ser
 Ile
 Leu
 Tyr
 Ser
 Leu
 Leu
 Tyr
 Ser
 Leu
 Leu
 Tyr
 Ser
 Leu
 Leu
 Leu
 Leu
 Tyr
 Ser
 Leu
 Le

<210> 1341

<211> 60

<212> PRT

<213> Homo sapiens

<400> 1341

<210> 1342

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1342

 Met Leu Ser Leu Phe Ile Phe Leu Arg Phe Leu Pro Leu Gly Phe Cys

 1
 5
 10
 15

 Trp Lys Glu Leu His Pro Glu Ala Glu Gln Ser Glu Lys Val Asp Phe
 20
 25
 30

 Arg Lys Pro Trp Tyr Leu Thr Gly His Ala Ala Ser Leu Gly Ala Asp
 35
 40
 45
 48

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<210> 1343
<211> 70
<212> PRT
<213> Homo sapiens
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<210> 1344 <211> 99 <212> PRT <213> Homo sapiens

<210> 1345 <211> 112 <212> PRT <213> Homo sapiens

<210> 1346 <211> 360 <212> PRT <213> Homo sapiens

<400> 1346 Met Leu Phe Val Pro Val Thr Leu Cys Met Ile Val Val Val Ala Thr 1 5 10 Ile Lys Ser Val Arg Phe Tyr Thr Glu Lys Asn Gly Gln Leu Ile Tyr 20 25 Thr Pro Phe Thr Glu Asp Thr Pro Ser Val Gly Gln Arg Leu Leu Asn 40 Ser Val Leu Asn Thr Leu Ile Met Ile Ser Val Ile Val Val Met Thr 55 60 Ile Phe Leu Val Val Leu Tyr Lys Tyr Arg Cys Tyr Lys Phe Ile His 70 75 Gly Trp Leu Ile Met Ser Ser Leu Met Leu Phe Leu Phe Thr Tyr 90 Ile Tyr Leu Gly Glu Val Leu Lys Thr Tyr Asn Val Ala Met Asp Tyr 100 105 Pro Thr Leu Leu Thr Val Trp Asn Phe Gly Ala Val Gly Met Val 120 125 Cys Ile His Trp Lys Gly Pro Leu Val Leu Gln Gln Ala Tyr Leu Ile 135 1.40 Met Ile Ser Ala Leu Met Ala Leu Val Phe Ile Lys Tyr Leu Pro Glu 150 155 Trp Ser Ala Trp Val Ile Leu Gly Ala Ile Ser Val Tyr Asp Leu Val 165 170 Ala Val Leu Cys Pro Lys Gly Pro Leu Arg Met Leu Val Glu Thr Ala 180 185 Gln Glu Arg Asn Glu Pro Ile Phe Pro Ala Leu Ile Tyr Ser Ser Ala 200 205 Met Val Trp Thr Val Gly Met Ala Lys Leu Asp Pro Ser Ser Gln Gly 215 220 Ala Leu Gln Leu Pro Tyr Asp Pro Glu Met Glu Glu Asp Ser Tyr Asp 230 235 Ser Phe Gly Glu Pro Ser Tyr Pro Glu Val Phe Glu Pro Pro Leu Thr 245 250 Gly Tyr Pro Gly Glu Glu Leu Glu Glu Glu Glu Arg Gly Val Lys 260 265 270 Leu Gly Leu Gly Asp Phe Ile Phe Tyr Ser Val Leu Val Gly Lys Ala 280 Ala Ala Thr Gly Ser Gly Asp Trp Asn Thr Thr Leu Ala Cys Phe Val

<210> 1347 <211> 84 <212> PRT <213> Homo sapiens

<400> 1347 Met Ile Leu Ser Leu Tyr Tyr Lys Leu Phe Gly Lys Leu Ala Val Ala 1 5 10 Thr Ile Glu Ile Leu His Cys Leu Cys Tyr Ile Glu Phe Val Ile Ile 20 25 30 Phe Lys Gly Phe Lys Lys Ile Pro Ile Cys Phe Phe Ser Phe Leu Phe 40 Ser Phe Val Pro His His Leu Asn Tyr Leu Gly Lys Tyr His Ser Ser 55 60 Lys Phe Glu Tyr Cys Leu Ser Asn Lys Lys Cys Glu Arg Tyr Glu 70 Glu Glu Arg \* 83

<210> 1348 <211> 65 <212> PRT <213> Homo sapiens

<210> 1349 <211> 58 <212> PRT <213> Homo sapiens

<210> 1350

<211> 60

<212> PRT

<213> Homo sapiens

<221> misc\_feature

<222> (1)...(60)

<223> Xaa = any amino acid or nothing

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<400> 1350

<210> 1351

<211> 56

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<212> PRT

<213> Homo sapiens

<400> 1351

<210> 1352

<211> 701

<212> PRT

<213> Homo sapiens

<400> 1352 Met Glu Pro Leu Cys Pro Leu Leu Leu Val Gly Phe Ser Leu Pro Leu 10 Ala Arg Ala Leu Arg Gly Asn Glu Thr Thr Ala Asp Ser Asn Glu Thr 25 Thr Thr Thr Ser Gly Pro Pro Asp Pro Gly Ala Ser Gln Pro Leu Leu 40 Ala Trp Leu Leu Leu Pro Leu Leu Leu Leu Leu Leu Val Leu Leu Leu 55 Ala Ala Tyr Phe Phe Arg Phe Arg Lys Gln Arg Lys Ala Val Val Ser 70 Thr Ser Asp Lys Lys Met Pro Asn Gly Ile Leu Glu Glu Gln Glu Gln 85 90 Gln Arg Val Met Leu Leu Ser Arg Ser Pro Ser Gly Pro Lys Lys Tyr 100 105 Phe Pro Ile Pro Val Glu His Leu Glu Glu Glu Ile Arg Ile Arg Ser 120 125 Ala Asp Asp Cys Lys Gln Phe Arg Glu Glu Phe Asn Ser Leu Pro Ser 135 140 Gly His Ile Gln Gly Thr Phe Glu Leu Ala Asn Lys Glu Glu Asn Arg 150 155 Glu Lys Asn Arg Tyr Pro Asn Ile Leu Pro Asn Asp His Ser Arg Val 170 Ile Leu Ser Gln Leu Asp Gly Ile Pro Cys Ser Asp Tyr Ile Asn Ala 180 185 Ser Tyr Ile Asp Gly Tyr Lys Glu Lys Asn Lys Phe Ile Ala Ala Gln 200 205 Gly Pro Lys Gln Glu Thr Val Asn Asp Phe Trp Arg Met Val Trp Glu 215 220 Gln Lys Ser Ala Thr Ile Val Met Leu Thr Asn Leu Lys Glu Arg Lys 230 235 Glu Glu Lys Cys His Gln Tyr Trp Pro Asp Gln Gly Cys Trp Thr Tyr 245 250 Gly Asn Ile Arg Val Cys Val Glu Asp Cys Val Val Leu Val Asp Tyr . 260 265 Thr Ile Arg Lys Phe Cys Ile Gln Pro Gln Leu Pro Asp Gly Cys Lys 280 Ala Pro Arg Leu Val Ser Gln Leu His Phe Thr Ser Trp Pro Asp Phe 295 300 Gly Val Pro Phe Thr Pro Ile Gly Met Leu Lys Phe Leu Lys Lys Val 310 .315 Lys Thr Leu Asn Pro Val His Ala Gly Pro Ile Val Val His Cys Ser 325 330 Ala Gly Val Gly Arg Thr Gly Thr Phe Ile Val Ile Asp Ala Met Met 345 Ala Met Met His Ala Glu Gln Lys Val Asp Val Phe Glu Phe Val Ser 360 Arg Ile Arg Asn Gln Arg Pro Gln Met Val Gln Thr Asp Met Gln Tyr 375 380 Thr Phe Ile Tyr Gln Ala Leu Leu Glu Tyr Tyr Leu Tyr Gly Asp Thr 390 395 Glu Leu Asp Val Ser Ser Leu Glu Lys His Leu Gln Thr Met His Gly 405 410 Thr Thr Thr His Phe Asp Lys Ile Gly Leu Glu Glu Glu Phe Arg Lys 425 Leu Thr Asn Val Arg Ile Met Lys Glu Asn Met Arg Thr Gly Asn Leu 440 Pro Ala Asn Met Lys Lys Ala Arg Val Ile Gln Ile Ile Pro Tyr Asp

Phe Asn Arg Val Ile Leu Ser Met Lys Arg Gly Gln Glu Tyr Thr Asp 470 475 Tyr Ile Asn Ala Ser Phe Ile Asp Gly Tyr Arg Gln Lys Asp Tyr Phe 485 490 Ile Ala Thr Gln Gly Pro Leu Ala His Thr Val Glu Asp Phe Trp Arq 505 Met Ile Trp Glu Trp Lys Ser His Thr Ile Val Met Leu Thr Glu Val 515 520 Gln Glu Arg Glu Gln Asp Lys Cys Tyr Gln Tyr Trp Pro Thr Glu Gly 535 540 Ser Val Thr His Gly Glu Ile Thr Ile Glu Ile Lys Asn Asp Thr Leu 555 550 Ser Glu Ala Ile Ser Ile Arg Asp Phe Leu Val Thr Leu Asn Gln Pro 565 . 570 Gln Ala Arg Gln Glu Gln Val Arg Val Val Arg Gln Phe His Phe 585 His Gly Trp Pro Glu Ile Gly Ile Pro Ala Glu Gly Lys Gly Met Ile 600 Asp Leu Ile Ala Ala Val Gln Lys Gln Gln Gln Gln Thr Gly Asn His 615 620 Pro Ile Thr Val His Cys Ser Ala Gly Ala Gly Arg Thr Gly Thr Phe 625 630 Ile Ala Leu Ser Asn Ile Leu Glu Arg Val Lys Ala Glu Gly Leu Leu 645 650 Asp Val Phe Gln Ala Val Lys Ser Leu Arg Leu Gln Arg Pro His Met 660 665 Val Gln Thr Leu Glu Gln Tyr Glu Phe Cys Tyr Lys Val Val Gln Asp 680 Phe Ile Asp Ile Phe Ser Asp Tyr Ala Asn Phe Lys \* 690 695

<210> 1353

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1353

<210> 1354

<211> 58

<212> PRT

<213> Homo sapiens

<400> 1354

Met Ser Val Cys Lys Tyr Thr Val Tyr Gly Phe Phe Ile Phe Ala Phe

<210> 1355 <211> 4261 <212> PRT <213> Homo sapiens

<400> 1355 Met Leu Ser Ala Ile Leu Leu Leu Gln Leu Trp Asp Ser Gly Ala 10 Gln Glu Thr Asp Asn Glu Arg Ser Ala Gln Gly Thr Ser Ala Pro Leu Leu Pro Leu Leu Gln Arg Phe Gln Ser Ile Ile Cys Arg Lys Asp Ala Pro His Ser Glu Gly Asp Met His Leu Leu Ser Gly Pro Leu Ser Pro 55 Asn Glu Ser Phe Leu Arg Tyr Leu Thr Leu Pro Gln Asp Asn Glu Leu 70 75 Ala Ile Asp Leu Arg Gln Thr Ala Val Val Met Ala His Leu Asp 90 Arg Leu Ala Thr Pro Cys Met Pro Pro Leu Cys Ser Ser Pro Thr Ser 105 His Lys Gly Ser Leu Gln Glu Val Ile Gly Trp Gly Leu Ile Gly Trp 115 120 Lys Tyr Tyr Ala Asn Val Ile Gly Pro Ile Gln Cys Glu Gly Leu Ala 130 135 140 Asn Leu Gly Val Thr Gln Ile Ala Cys Ala Glu Lys Arg Phe Leu Ile 150 155 Leu Ser Arg Asn Gly Arg Val Tyr Thr Gln Ala Tyr Asn Ser Asp Thr 170 Leu Ala Pro Gln Leu Val Gln Gly Leu Ala Ser Arg Asn Ile Val Lys 185 Ile Ala Ala His Ser Asp Gly His His Tyr Leu Ala Leu Ala Ala Thr 200 Gly Glu Val Tyr Ser Trp Gly Cys Gly Asp Gly Gly Arg Leu Gly His 215 220 Gly Asp Thr Val Pro Leu Glu Glu Pro Lys Val Ile Ser Ala Phe Ser 230 235 Gly Lys Gln Ala Gly Lys His Val Val His Ile Ala Cys Gly Ser Thr 250 Tyr Ser Ala Ala Ile Thr Ala Glu Gly Glu Leu Tyr Thr Trp Gly Arg 265 Gly Asn Tyr Gly Arg Leu Gly His Gly Ser Ser Glu Asp Glu Ala Ile 280 Pro Met Leu Val Ala Gly Leu Lys Gly Leu Lys Val Ile Asp Val Ala 295 300 Cys Gly Ser Gly Asp Ala Gln Thr Leu Ala Val Thr Glu Asn Gly Gln 315 310 Val Trp Ser Trp Gly Asp Gly Asp Tyr Gly Lys Leu Gly Arg Gly Gly 325 . 330

Ser Asp Gly Cys Lys Thr Pro Lys Leu Ile Glu Lys Leu Gln Asp Leu 345 Asp Val Val Lys Val Arg Cys Gly Ser Gln Phe Ser Ile Ala Leu Thr Lys Asp Gly Gln Val Tyr Ser Trp Gly Lys Gly Asp Asn Gln Arg Leu 375 Gly His Gly Thr Glu Glu His Val Arg Tyr Pro Lys Leu Leu Glu Gly 390 395 Leu Gln Gly Lys Lys Val Ile Asp Val Ala Ala Gly Ser Thr His Cys 405 410 Leu Ala Leu Thr Glu Asp Ser Glu Val His Ser Trp Gly Ser Asn Asp 420 425 Gln Cys Gln His Phe Asp Thr Leu Arg Val Thr Lys Pro Glu Pro Ala 440 Ala Leu Pro Gly Leu Asp Thr Lys His Ile Val Gly Ile Ala Cys Gly 455 460 Pro Ala Gln Ser Phe Ala Trp Ser Ser Cys Ser Glu Trp Ser Ile Gly 470 475 Leu Arg Val Pro Phe Val Val Asp Ile Cys Ser Met Thr Phe Glu Gln 485 490 Leu Asp Leu Leu Arg Gln Val Ser Glu Gly Met Asp Gly Ser Ala 505 Asp Trp Pro Pro Pro Gln Glu Lys Glu Cys Val Ala Val Ala Thr Leu 520 Asn Leu Leu Arg Leu Gln Leu His Ala Ala Ile Ser His Gln Val Asp 535 540 Pro Glu Phe Leu Gly Leu Gly Leu Gly Ser Ile Leu Leu Asn Ser Leu 550 555 Lys Gln Thr Val Val Thr Leu Ala Ser Ser Ala Gly Val Leu Ser Thr 570 Val Gln Ser Ala Ala Gln Ala Val Leu Gln Ser Gly Trp Ser Val Leu 580 585 Leu Pro Thr Ala Glu Glu Arg Ala Arg Ala Leu Ser Ala Leu Leu Pro 595 600 Cys Ala Val Ser Gly Asn Glu Val Asn Ile Ser Pro Gly Arg Arg Phe 610 615 620 Met Ile Asp Leu Leu Val Gly Ser Leu Met Ala Asp Gly Gly Leu Glu 630 635 Ser Ala Leu His Ala Ala Ile Thr Ala Glu Ile Gln Asp Ile Glu Ala 650 Lys Lys Glu Ala Gln Lys Glu Lys Glu Ile Asp Glu Gln Glu Ala Asn 665 Ala Ser Thr Phe His Arg Ser Arg Thr Pro Leu Asp Lys Asp Leu Ile 680 685 Asn Thr Gly Ile Cys Glu Ser Ser Gly Lys Gln Cys Leu Pro Leu Val 695 700 Gln Leu Ile Gln Gln Leu Leu Arg Asn Ile Ala Ser Gln Thr Val Ala 715 Arg Leu Lys Asp Val Ala Arg Arg Ile Ser Ser Cys Leu Asp Phe Glu 730 Gln His Ser Arg Glu Arg Ser Ala Ser Leu Asp Trp Leu Leu Arg Phe 740 745 Gln Arg Leu Leu Ile Ser Lys Leu Tyr Pro Gly Glu Ser Ile Gly Gln 760 765 Thr Ser Asp Ile Ser Ser Pro Glu Leu Met Gly Val Gly Ser Leu Leu 770 775 780 Lys Lys Tyr Thr Ala Leu Leu Cys Thr His Ile Gly Asp Ile Leu Pro 790 795 Val Ala Ala Ser Ile Ala Ser Thr Ser Trp Arg His Phe Ala Glu Val

				805					810					815	
Ala	Tyr	Ile	Val 820	Glu	Gly	Asp	Phe	Thr 825	Gly	Val	Leu	Leu	Pro 830	Glu	Leu
Val	Val	Ser 835	Ile	Val	Leu	Leu	Leu 840	Ser	Lys	Asn	Ala	Asp 845	Leu	Met	Gln
Glu	Ala 850	Gly	Ala	Val	Pro	Leu 855	Leu	Gly	Gly	Leu	Leu 860	Glu	His	Leu	Asp
Arg 865	Phe	Asn	His	Leu	Ala 870	Pro	Gly	Lys	Glu	Arg 875	Asp	Asp	His	Glu	Glu 880
Leu	Ala	Trp	Pro	Gly 885	Ile	Met	Glu	Ser	Phe 890	Phe	Thr	Gly	Gln	Asn 895	Cys
			Glu 900					905					910		
		915	Asp				920					925			•
Asp	Ile 930	Lys	Asp	Phe	Gln	Thr 935	Gln	Ser	Leu	Thr	Gly 940	Asn	Ser	Ile	Leu
Ala 945	Gln	Phe	Ala	Gly	Glu 950	Asp	Pro	Val	Val	Ala 955	Leu	Glu	Ala	Ala	Leu 960
Gln	Phe	Glu	Asp	Thr 965	Arg ·	Glu	Ser	Met	His 970	Ala	Phe	Cys	Val	Gly 975	Gln
			Pro 980					985				-	990	_	
		995	Pro			1	L000				1	1005			
:	1010		Ala		_ :	1015				1	L020				
1025			Cys	:	1030	-			:	L035					1040
				L045				-	1050					1055	
		:	Ser 1060				1	L065					L070		
	]	L075	Arg			=	1080				1	1085			
:	1090		Asp		3	1095		-		I	1100				
1105			Glu		1110		_		:	1115				1	L120
Met	Pne	Pro	Pro	G1u L125	HIS	Pro	Val		G1u 1130	Val	GIA	Arg		Leu 1135	Leu
		3	Leu l140					1145				3	150		
Val		Ala 1155	Gly	Ala	Leu	_	Ile L160	Glu	Gln	Val	_	His 1165	Arg	Thr	Leu
:	1170		Val		- :	1175	_	_		1	1180			_	_
Ser 1185	Leu	Ile	Lys		His 1190	Gln	Glu	Gln		Arg 1195	Ser	Tyr	Lys		Val L200
				L205				- 1	1210				1	L215	
		2	Cys 1220				1	1225				1	1230		
	1	1235	Pro			1	L240				1	L245			
:	1250		Lys		:	1255				1	L260		_	_	
Glu 1265	Lys	Ile	Gly		Glu 1270	GLu	Ser	Asp		Glu 1275	Glu	Ala	Cys		Leu 1280

Pro His Ser Pro Ile Asn Val Asp Lys Arg Pro Ile Ala Ile Lys Ser 1285 1290 1295 Pro Lys Asp Lys Trp Gln Pro Leu Leu Ser Thr Val Thr Gly Val His 1300 1305 1310 Lys Tyr Lys Trp Leu Lys Gln Asn Val Gln Gly Leu Tyr Pro Gln Ser 1325 1315 1320 Pro Leu Leu Ser Thr Ile Ala Glu Phe Ala Leu Lys Glu Glu Pro Val 1330 1335 1340 Asp Val Glu Lys Met Arg Lys Cys Leu Leu Lys Gln Leu Glu Arg Ala 1345 1350 1355 1360 Glu Val Arg Leu Glu Gly Ile Asp Thr Ile Leu Lys Leu Ala Ser Lys 1365 1370 1375 Asn Phe Leu Leu Pro Ser Val Gln Tyr Ala Met Phe Cys Gly Trp Gln 1380 1385 1390 Arg Leu Ile Pro Glu Gly Ile Asp Ile Gly Glu Pro Leu Thr Asp Cys 1395 1400 1405 Leu Lys Asp Val Asp Leu Ile Pro Pro Phe Asn Arg Met Leu Leu Glu 1410 1415 1420 Val Thr Phe Gly Lys Leu Tyr Ala Trp Ala Val Gln Asn Ile Arg Asn 1425 1430 1435 Val Leu Met Asp Ala Ser Ala Thr Phe Lys Glu Leu Gly Ile Gln Pro 1445 1450 1455 Val Pro Leu Gln Thr Ile Thr Asn Glu Asn Pro Ser Gly Pro Ser Leu 1460 1465 1470 Gly Thr Ile Pro Gln Ala Arg Phe Leu Leu Val Met Leu Ser Met Leu 1475 1480 1485 Thr Leu Gln His Gly Ala Asn Asn Leu Asp Leu Leu Leu Asn Ser Gly 1490 1495 1500 Met Leu Ala Leu Thr Gln Thr Ala Leu Arg Leu Ile Gly Pro Ser Cys 1505 1510 1515 Asp Asn Val Glu Glu Asp Met Asn Ala Ser Ala Gln Gly Ala Ser Ala 1525 1530 1535 Thr Val Leu Glu Glu Thr Arg Lys Glu Thr Ala Pro Val Gln Leu Pro 1540 1545 1550 Val Ser Gly Pro Glu Leu Ala Ala Met Met Lys Ile Gly Thr Arg Val 1555 1560 1565 Met Arg Gly Val Asp Trp Lys Trp Gly Asp Gln Asp Gly Pro Pro 1570 1575 1580 Gly Leu Gly Arg Val Ile Gly Glu Leu Gly Glu Asp Gly Trp Ile Arg 1585 1590 1595 Val Gln Trp Asp Thr Gly Ser Thr Asn Ser Tyr Arg Met Gly Lys Glu 1605 1610 1615 Gly Lys Tyr Asp Leu Lys Leu Ala Glu Leu Pro Ala Ala Ala Gln Pro 1620 1625 1630 Ser Ala Glu Asp Ser Asp Thr Glu Asp Asp Ser Glu Ala Glu Gln Thr 1640 1645 Glu Arg Asn Ile His Pro Thr Ala Met Met Phe Thr Ser Thr Ile Asn 1650 1655 1660 Leu Leu Gln Thr Leu Cys Leu Ser Ala Gly Val His Ala Glu Ile Met 1670 1675 Gln Ser Glu Ala Thr Lys Thr Leu Cys Gly Leu Leu Arg Met Leu Val 1685 1690 1695 Glu Ser Gly Thr Thr Asp Lys Thr Ser Ser Pro Asn Arg Leu Val Tyr 1700 1705 1710 Arg Glu Gln His Arg Ser Trp Cys Thr Leu Gly Phe Val Arg Ser Ile 1720 1725 Ala Leu Thr Pro Gln Val Cys Gly Ala Leu Ser Ser Pro Gln Trp Ile 1735 1740 Thr Leu Leu Met Lys Val Val Glu Gly His Ala Pro Phe Thr Ala Thr

1745 1750 1755 Ser Leu Gln Arg Gln Ile Leu Ala Val His Leu Leu Gln Ala Val Leu 1765 1770 Pro Ser Trp Asp Lys Thr Glu Arg Ala Arg Asp Met Lys Cys Leu Val 1785 1790 Glu Lys Leu Phe Asp Phe Leu Gly Ser Leu Leu Thr Thr Cys Ser Ser 1795 1800 1805 Asp Val Pro Leu Leu Arg Glu Ser Thr Leu Arg Arg Arg Val Arg 1810 1815 1820 Pro Gln Ala Ser Leu Thr Ala Thr His Ser Ser Thr Leu Ala Glu Glu 1830 1835 Val Val Ala Leu Leu Arg Thr Leu His Ser Leu Thr Gln Trp Asn Gly 1845 1850 1855 Leu Ile Asn Lys Tyr Ile Asn Ser Gln Leu Arg Ser Ile Thr His Ser 1860 1865 1870 Phe Val Gly Arg Pro Ser Glu Gly Ala Gln Leu Glu Asp Tyr Phe Pro 1875 1880 1885 Asp Ser Glu Asn Pro Glu Val Gly Gly Leu Met Ala Val Leu Ala Val 1895 1900 Ile Gly Gly Ile Asp Gly Arg Leu Arg Leu Gly Gly Gln Val Met His 1910 1915 Asp Glu Phe Gly Glu Gly Thr Val Thr Arg Ile Thr Pro Lys Gly Lys 1925 1930 1935 Ile Thr Val Gln Phe Ser Asp Met Arg Thr Cys Arg Val Cys Pro Leu 1940 1945 1950 Asn Gln Leu Lys Pro Leu Pro Ala Val Ala Phe Asn Val Asn Asn Leu 1955 1960 1965 Pro Phe Thr Glu Pro Met Leu Ser Val Trp Ala Gln Leu Val Asn Leu 1970 1975 1980 Ala Gly Ser Lys Leu Glu Lys His Lys Ile Lys Lys Ser Thr Lys Gln 1990 1995 2000 Ala Phe Ala Gly Gln Val Asp Leu Asp Leu Leu Arg Cys Gln Gln Leu 2005 2010 2015 Lys Leu Tyr Ile Leu Lys Ala Gly Arg Ala Leu Leu Ser His Gln Asp 2020 2025 2030 Lys Leu Arg Gln Ile Leu Ser Gln Pro Ala Val Gln Glu Thr Gly Thr 2035 2040 2045 Val His Thr Asp Asp Gly Ala Val Ser Pro Asp Leu Gly Asp Met 2050 2055 2060 Ser Pro Glu Gly Pro Gln Pro Pro Met Ile Leu Leu Gln Gln Leu Leu 2070 2075 2080 Ala Ser Ala Thr Gln Pro Ser Pro Val Lys Ala Ile Phe Asp Lys Gln 2090 2095 Glu Leu Glu Ala Ala Leu Ala Val Cys Gln Cys Leu Ala Val Glu 2105 2110 Ser Thr His Pro Ser Ser Pro Gly Phe Glu Asp Cys Ser Ser Ser Glu 2115 2120 2125 Ala Thr Thr Pro Val Ala Val Gln His Ile His Pro Ala Arg Val Lys 2135 2140 Arg Arg Lys Gln Ser Pro Val Pro Ala Leu Pro Ile Val Val Gln Leu 2150 2155 2160 Met Glu Met Gly Phe Ser Arg Arg Asn Ile Glu Phe Ala Leu Lys Ser 2165 2170 Leu Thr Gly Ala Ser Gly Asn Ala Ser Ser Leu Pro Gly Val Glu Ala 2185 2190 2180 Leu Val Gly Trp Leu Leu Asp His Ser Asp Ile Gln Val Thr Glu Leu 2195 2200 2205 Ser Asp Ala Asp Thr Val Ser Asp Glu Tyr Ser Asp Glu Glu Val Val 2210 2215 2220

Glu Asp Val Asp Asp Ala Ala Tyr Ser Met Ser Thr Gly Ala Val Val 2230 2235 2240 Thr Glu Ser Gln Thr Tyr Lys Lys Arg Ala Asp Phe Leu Ser Asn Asp 2245 2250 Asp Tyr Ala Val Tyr Val Arg Glu Asn Ile Gln Val Gly Met Met Val 2260 2265 2270 Arg Cys Cys Arg Ala Tyr Glu Glu Val Cys Glu Gly Asp Val Gly Lys 2275 2280 2285 Val Ile Lys Leu Asp Arg Asp Gly Leu His Asp Leu Asn Val Gln Cys 2290 2295 2300 Asp Trp Gln Gln Lys Gly Gly Thr Tyr Trp Val Arg Tyr Ile His Val 2305 2310 2315 Glu Leu Ile Gly Tyr Pro Pro Pro Ser Ser Ser His Ile Lys Ile 2325 2330 Gly Asp Lys Val Arg Val Lys Ala Ser Val Thr Thr Pro Lys Tyr Lys 2340 2345 2350 Trp Gly Ser Val Thr His Gln Ser Val Gly Val Val Lys Ala Phe Ser 2355 2360 2365 Ala Asn Gly Lys Asp Ile Ile Val Asp Phe Pro Gln Gln Ser His Trp 2370 2375 2380 Thr Gly Leu Leu Ser Glu Met Glu Leu Val Pro Ser Ile His Pro Gly 2385 2390 2395 2400 Val Thr Cys Asp Gly Cys Gln Met Phe Pro Ile Asn Gly Ser Arg Phe 2405 2410 2415 Lys Cys Arg Asn Cys Asp Asp Phe Asp Phe Cys Glu Thr Cys Phe Lys 2420 2425 2430 Thr Lys Lys His Asn Thr Arg His Thr Phe Gly Arg Ile Asn Glu Pro 2435 2440 2445 Gly Gln Ser Ala Val Phe Cys Gly Arg Ser Gly Lys Gln Leu Lys Arg 2450 2455 2460 Cys His Ser Ser Gln Pro Gly Met Leu Leu Asp Ser Trp Ser Arg Met 2465 2470 2475 2480 Val Lys Ser Leu Asn Val Ser Ser Ser Val Asn Gln Ala Ser Arg Leu 2485 2490 2495 Ile Asp Gly Ser Glu Pro Cys Trp Gln Ser Ser Gly Ser Gln Gly Lys 2500 2505 2510 His Trp Ile Arg Leu Glu Ile Phe Pro Asp Val Leu Val His Arg Leu 2515 2520 2525 Lys Met Ile Val Asp Pro Ala Asp Ser Ser Tyr Met Pro Ser Leu Val 2530 2535 2540 Val Val Ser Gly Gly Asn Ser Leu Asn Asn Leu Ile Glu Leu Lys Thr 2550 2555 Ile Asn Ile Asn Pro Ser Asp Thr Thr Val Pro Leu Leu Asn Asp Tyr 2565 2570 2575 Thr Glu Tyr His Arg Tyr Ile Glu Ile Ala Ile Lys Gln Cys Arg Ser 2580 2585 2590 Ser Gly Ile Asp Cys Lys Ile His Gly Leu Ile Leu Leu Gly Arg Ile 2600 2605 Arg Ala Glu Glu Asp Leu Ala Ala Val Pro Phe Leu Ala Ser Asp 2615 2620 Asn Glu Glu Glu Asp Glu Lys Gly Asn Ser Gly Ser Leu Ile Arg 2630 2635 Lys Lys Ala Ala Gly Leu Glu Ser Ala Ala Thr Ile Arg Thr Lys Val 2645 2650 Phe Val Trp Gly Leu Asn Asp Lys Asp Gln Leu Gly Gly Leu Lys Gly 2660 2665 2670 Ser Lys Ile Lys Val Pro Ser Phe Ser Glu Thr Leu Ser Ala Leu Asn 2680 2685 Val Val Gln Val Ala Gly Gly Ser Lys Ser Leu Phe Ala Val Thr Val

2695 2700 2690 Glu Gly Lys Val Tyr Ala Cys Gly Glu Ala Thr Asn Gly Arg Leu Gly 2710 2715 Leu Gly Ile Ser Ser Gly Thr Val Pro Ile Pro Arg Gln Ile Thr Ala 2725 2730 2735 Leu Ser Ser Tyr Val Val Lys Lys Val Ala Val His Ser Gly Gly Arg 2740 2745 2750 His Ala Thr Ala Leu Thr Val Asp Gly Lys Val Phe Ser Trp Gly Glu 2755 2760 Gly Asp Asp Gly Lys Leu Gly His Phe Ser Arg Met Asn Cys Asp Lys 2770 2775 2780 Pro Arg Leu Ile Glu Ala Leu Lys Thr Lys Arg Ile Arg Asp Ile Ala 2790 2795 2800 Cys Gly Ser Ser His Ser Ala Ala Leu Thr Ser Ser Gly Glu Leu Tyr 2805 2810 Thr Trp Gly Leu Gly Glu Tyr Gly Arg Leu Gly His Gly Asp Asn Thr 2820 2825 2830 Thr Gln Leu Lys Pro Lys Met Val Lys Val Leu Leu Gly His Arg Val 2840 2845 Ile Gln Val Ala Cys Gly Ser Arg Asp Ala Gln Thr Leu Ala Leu Thr 2855 2860 Asp Glu Gly Leu Val Phe Ser Trp Gly Asp Gly Asp Phe Gly Lys Leu 2865 2870 2875 2880 Gly Arg Gly Gly Ser Glu Gly Cys Asn Ile Pro Gln Asn Ile Glu Arg 2885 2890 2895 Leu Asn Gly Gln Gly Val Cys Gln Ile Glu Cys Gly Ala Gln Phe Ser 2900 2905 2910 Leu Ala Leu Thr Lys Ser Gly Val Val Trp Thr Trp Gly Lys Gly Asp 2915 2920 2925 Tyr Phe Arg Leu Gly His Gly Ser Asp Val His Val Arg Lys Pro Gln 2930 2935 2940 Val Val Glu Gly Leu Arg Gly Lys Lys Ile Val His Val Ala Val Gly 2945 2950 2955 2960 Ala Leu His Cys Leu Ala Val Thr Asp Ser Gly Gln Val Tyr Ala Trp 2965 2970 2975 Gly Asp Asn Asp His Gly Gln Gln Gly Asn Gly Thr Thr Thr Val Asn 2980 2985 2990 Arg Lys Pro Thr Leu Val Gln Gly Leu Glu Gly Gln Lys Ile Thr Arg 2995 3000 3005 Val Ala Cys Gly Ser Ser His Ser Val Ala Trp Thr Thr Val Asp Val 3010 3015 3020 Ala Thr Pro Ser Val His Glu Pro Val Leu Phe Gln Thr Ala Arg Asp 3025 3030 3035 3040 Pro Leu Gly Ala Ser Tyr Leu Gly Val Pro Ser Asp Ala Asp Ser Ser 3045 3050 3055 Ala Ala Ser Asn Lys Ile Ser Gly Ala Ser Asn Ser Lys Pro Asn Arg 3060 3065 3070 Pro Ser Leu Ala Lys Ile Leu Leu Ser Leu Asp Gly Asn Leu Ala Lys 3075 3080 3085 Gln Gln Ala Leu Ser His Ile Leu Thr Ala Leu Gln Ile Met Tyr Ala 3090 3095 3100 Arg Asp Ala Val Val Gly Ala Leu Met Pro Ala Ala Met Ile Ala Pro 3105 3110 3115 3120 Val Glu Cys Pro Ser Phe Ser Ser Ala Ala Pro Ser Asp Ala Ser Ala 3125 3130 3135 Met Ala Ser Pro Met Asn Gly Glu Glu Cys Met Leu Ala Val Asp Ile 3145 3150 Glu Asp Arg Leu Ser Pro Asn Pro Trp Gln Glu Lys Arg Glu Ile Val 3155 3160

Ser Ser Glu Asp Ala Val Thr Pro Ser Ala Val Thr Pro Ser Ala Pro 3175 3180 Ser Ala Ser Ala Arg Pro Phe Ile Pro Val Thr Asp Asp Leu Gly Ala 3190 3195 3200 Ala Ser Ile Ile Ala Glu Thr Met Thr Lys Thr Lys Glu Asp Val Glu 3205 3210 3215 Ser Gln Asn Lys Ala Ala Gly Pro Glu Pro Gln Ala Leu Asp Glu Phe 3220 3225 3230 Thr Ser Leu Leu Ile Ala Asp Asp Thr Arg Val Val Asp Leu Leu 3235 3240 3245 Lys Leu Ser Val Cys Ser Arg Ala Gly Asp Arg Gly Arg Asp Val Leu 3250 3255 3260 Ser Ala Val Leu Ser Gly Met Gly Thr Ala Tyr Pro Gln Val Ala Asp 3265 3270 3275 3280 Met Leu Glu Leu Cys Val Thr Glu Leu Glu Asp Val Ala Thr Asp 3285 3290 3295 Ser Gln Ser Gly Arg Leu Ser Ser Gln Pro Val Val Val Glu Ser Ser 3300 3305 . 3310 His Pro Tyr Thr Asp Asp Thr Ser Thr Ser Gly Thr Val Lys Ile Pro 3315 3320 ' 3325 Gly Ala Glu Gly Leu Arg Val Glu Phe Asp Arg Gln Cys Ser Thr Glu 3330 3335 3340 Arg Arg His Asp Pro Leu Thr Val Met Asp Gly Val Asn Arg Ile Val 3345 3350 3355 3360 Ser Val Arg Ser Gly Arg Glu Trp Ser Asp Trp Ser Ser Glu Leu Arg 3365 3370 3375 Ile Pro Gly Asp Glu Leu Lys Trp Lys Phe Ile Ser Asp Gly Ser Val 3380 3385 3390 Asn Gly Trp Gly Trp Arg Phe Thr Val Tyr Pro Ile Met Pro Ala Ala 3395 3400 3405 Gly Pro Lys Glu Leu Leu Ser Asp Arg Cys Val Leu Ser Cys Pro Ser 3410 3415 3420 Met Asp Leu Val Thr Cys Leu Leu Asp Phe Arg Leu Asn Leu Ala Ser 3425 3430 3435 3440 Asn Arg Ser Ile Val Pro Arg Leu Ala Ala Ser Leu Ala Ala Cys Ala 3445 3450 3455 Gln Leu Ser Ala Leu Ala Ala Ser His Arg Met Trp Ala Leu Gln Arg 3460 3465 3470 Leu Arg Lys Leu Leu Thr Thr Glu Phe Gly Gln Ser Ile Asn Ile Asn 3475 3480 3485 Arg Leu Leu Gly Glu Asn Asp Gly Glu Thr Arg Ala Leu Ser Phe Thr 3490 3495 3500 Gly Ser Ala Leu Ala Ala Leu Val Lys Gly Leu Pro Glu Ala Leu Gln 3505 3510 3515 3520 Arg Gln Phe Glu Tyr Glu Asp Pro Ile Val Arg Gly Gly Lys Gln Leu 3525 3530 3535 Leu His Ser Pro Phe Phe Lys Val Leu Val Ala Leu Ala Cys Asp Leu 3540 3545 3550 Glu Leu Asp Thr Leu Pro Cys Cys Ala Glu Thr His Lys Trp Ala Trp 3560 3565 Phe Arg Arg Tyr Cys Met Ala Ser Arg Val Ala Val Ala Leu Asp Lys 3570 3575 3580 Arg Thr Pro Leu Pro Arg Leu Phe Leu Asp Glu Val Ala Lys Lys Ile 3590 3595 Arg Glu Leu Met Ala Asp Ser Glu Asn Met Asp Val Leu His Glu Ser 3610 3615 3605 His Asp Ile Phe Lys Arg Glu Gln Asp Glu Gln Leu Val Gln Trp Met 3620 3625 3630 Asn Arg Arg Pro Asp Asp Trp Thr Leu Ser Ala Gly Gly Ser Gly Thr

3635 . . 3640 3645 Ile Tyr Gly Trp Gly His Asn His Arg Gly Gln Leu Gly Gly Ile Glu 3650 3655 3660 Gly Ala Lys Val Lys Val Pro Thr Pro Cys Glu Ala Leu Ala Thr Leu 3665 · 3670 · 3675 Arg Pro Val Gln Leu Ile Gly Gly Glu Gln Thr Leu Phe Ala Val Thr 3685 3690 3695 Ala Asp Gly Lys Leu Tyr Ala Thr Gly Tyr Gly Ala Gly Gly Arg Leu 3700 3705 3710 Gly Ile Gly Gly Thr Glu Ser Val Ser Thr Pro Thr Leu Leu Glu Ser 3715 3720 3725 Ile Gln His Val Phe Ile Lys Lys Val Ala Val Asn Ser Gly Gly Lys 3730 3735 3740 His Cys Leu Ala Leu Ser Ser Glu Gly Glu Val Tyr Ser Trp Gly Glu 3745 3750 3755 3760 Ala Glu Asp Gly Lys Leu Gly His Gly Asn Arg Ser Pro Cys Asp Arg 3770 3775 3765 Pro Arg Val Ile Glu Ser Leu Arg Gly Ile Glu Val Val Asp Val Ala 3785 3790 Ala Gly Gly Ala His Ser Ala Cys Val Thr Ala Ala Gly Asp Leu Tyr 3800 3805 Thr Trp Gly Lys Gly Arg Tyr Gly Arg Leu Gly His Ser Asp Ser Glu 3810 3815 3820 Asp Gln Leu Lys Pro Lys Leu Val Glu Ala Leu Gln Gly His Arg Val 3825 3830 3835 Val Asp Ile Ala Cys Gly Ser Gly Asp Ala Gln Thr Leu Cys Leu Thr 3845 3850 3855 Asp Asp Asp Thr Val Trp Ser Trp Gly Asp Gly Asp Tyr Gly Lys Leu 3860 3865 3870 Gly Arg Gly Gly Ser Asp Gly Cys Lys Val Pro Met Lys Ile Asp Ser 3875 3880 3885 Leu Thr Gly Leu Gly Val Val Lys Val Glu Cys Gly Ser Gln Phe Ser 3890 3895 3900 Val Ala Leu Thr Lys Ser Gly Ala Val Tyr Thr Trp Gly Lys Gly Asp 3905 3910 3915 3920 Tyr His Arg Leu Gly His Gly Ser Asp Asp His Val Arg Arg Pro Arg 3925 3930 3935 Gln Val Gln Gly Leu Gln Gly Lys Lys Val Ile Ala Ile Ala Thr Gly 3940 3945 3950 Ser Leu His Cys Val Cys Cys Thr Glu Asp Gly Glu Val Tyr Thr Trp 3955 3960 3965 Gly Asp Asn Asp Glu Gly Gln Leu Gly Asp Gly Thr Thr Asn Ala Ile 3970 3975 3980 Gln Arg Pro Arg Leu Val Ala Ala Leu Gln Gly Lys Lys Val Asn Arg 3985 3990 3995 4000 Val Ala Cys Gly Ser Ala His Thr Leu Ala Trp Ser Thr Ser Lys Pro 4005 4010 4015 Ala Ser Ala Gly Lys Leu Pro Ala Gln Val Pro Met Glu Tyr Asn His 4025 4030 Leu Gln Glu Ile Pro Ile Ile Ala Leu Arg Asn Arg Leu Leu Leu Leu 4040 4045 His His Leu Ser Glu Leu Phe Cys Pro Cys Ile Pro Met Phe Asp Leu 4055 4060 Glu Gly Ser Leu Asp Glu Thr Gly Leu Gly Pro Ser Val Gly Phe Asp 4065 4070 4075 Thr Leu Arg Gly Ile Leu Ile Ser Gln Gly Lys Glu Ala Ala Phe Arg 4085 4090 Lys Val Val Gln Ala Thr Met Val Arg Asp Arg Gln His Gly Pro Val 4105

Val Glu Leu Asn Arg Ile Gln Val Lys Arg Ser Arg Ser Lys Gly Gly 4115 4120 4125 Leu Ala Gly Pro Asp Gly Thr Lys Ser Val Phe Gly Gln Met Cys Ala 4130 4135 4140 Lys Met Ser Ser Phe Gly Pro Asp Ser Leu Leu Pro His Arg Val 4145 4150 4155 4160 Trp Lys Val Lys Phe Val Gly Glu Ser Val Asp Asp Cys Gly Gly 4165 4170 4175 Tyr Ser Glu Ser Ile Ala Glu Ile Cys Glu Glu Leu Gln Asn Gly Leu 4180 4185 4190 Thr Pro Leu Leu Ile Val Thr Pro Asn Gly Arg Asp Glu Ser Gly Ala 4195 4200 4205 Asn Arg Asp Cys Tyr Leu Leu Ser Pro Ala Ala Arg Ala Pro Val His 4210 4215 4220 Ser Ser Met Phe Arg Phe Leu Gly Val Leu Leu Gly Ile Ala Ile Arg 4225 4230 4235 Thr Gly Ser Pro Leu Ser Leu Asn Pro Cys Arg Ala Leu Ser Gly Ser 4245 4250 Ser Trp Leu Gly \* 4260

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<213> Homo sapiens

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<221> misc feature

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<223> Xaa = any amino acid or nothing

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 15

 Leu Ala Thr Leu Lys Val Leu Ser Leu Leu Trp Leu Leu Tyr Tyr Val
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 25
 30

 Ala Ser Thr Thr Arg Gln Pro His Ala Val Leu Tyr Gln Asp Pro His
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 40
 45

 Ala Gly Pro Leu Trp Val Arg Ser Ser Leu Val Leu Phe Gly Ser Cys

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70 72

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Phe Phe Phe Ala Phe Phe Arg Thr \* 50 55 56

<210> 1361

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1361

 Met
 Phe
 Val
 Leu
 Phe
 Leu
 Ile
 Leu
 Val
 Leu
 Val
 Leu
 Val
 Leu
 Val
 Leu
 Val
 Leu
 Val
 Ile
 Leu
 Val
 Cys
 Gly
 Phe
 Ile
 Ile
 Ser
 Val
 Cys
 Leu

 Arg
 Ala
 Lys
 His
 Phe
 Asn
 Phe
 Asp
 Glu
 Ala
 Gln
 Phe
 Val
 Ser
 Phe
 Phe

 Leu
 Cys
 Asp
 Ser
 Cys
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 Arg
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 Leu
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 Phe
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 Asn
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 Phe
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<213> Homo sapiens

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Gln Glu Gly Phe His Ser Lys Ser Cys His Cys Leu Gly Asp Ser Phe
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Arg Glu Lys Asn Gln Val Val Gly \*
50 55 56

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Leu Asp Leu Tyr Ser Ser Leu Phe Phe \* 50 55 57

<210> 1367

<211> 48

<212> PRT

<213> Homo sapiens

<400> 1367

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 Met
 Gly
 Arg
 Ile
 Phe
 Ala
 Ala
 Leu
 Ser
 Leu
 Ile
 Leu
 Met
 Met
 Met

 1
 5
 10
 10
 15
 15

 Tyr
 Ser
 Leu
 Phe
 Pro
 Val
 Ile
 Glu
 Ser
 Leu
 Cys
 His
 Leu
 Glu
 Val

 Trp
 Ala
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 Arg
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 Trp
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 Thr
 Ala
 Gly
 Arg
 Gly
 Val
 Pro
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<210> 1368

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 Met
 Gly
 Arg
 Arg
 Lys
 Ser
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 Leu
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 Cys
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 Glu
 Cys
 Arg
 Glu
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 Arg
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 Arg
 Pro
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 Cys
 Ser
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 Ala
 Pro
 Arg
 Pro
 Pro
 Ser
 Ala
 Leu
 Ile
 Leu
 Pro
 Pro
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<212> PRT

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<210> 1370

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<221> misc\_feature

<222> (1) ... (227)

<223> Xaa = any amino acid or nothing

70

<400> 1371

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Leu Ile Trp Pro Arg Cys Ile Phe Thr Arg His Asn Gln Gly Arg Gly
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                          200
Gly Ser Ser Met Gly Pro Ser Arg Trp Leu Cys Leu Gly Thr Phe Leu
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                       215
His Xaa Leu
225 227
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                                   10
Cys Leu Tyr Leu Ser Leu Ser Leu Tyr Leu Arg Ser Phe Phe Cys Leu
           20
                              25
Pro Phe His Val Ser Val Phe Leu Cys Leu Phe Pro Ser Val Leu Phe
                           40
Leu Ser Val Ala Leu Gly Ser Pro Glu Asn His Ile Ser Trp Arg Lys
                       55
                                         60
Val Gly Glu Glu Leu Lys Leu Ala Ser His Arg Asn Phe Cys Ser Leu
                   70
                                      75
Ile Gln Met Met Arg Ser Asn Lys Pro Ser Pro Ser Arg Gln Arg Gly
Trp Ala *
    98
    <210> 1373
    <211> 69
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    <213> Homo sapiens
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Ser Arg Pro Val Leu Tyr Thr Leu Cys Leu Leu Ile Pro Val Leu Cys
           20
                               25
Gly Asp Thr Phe Trp Ala Ser Trp Ser Leu Leu Thr Lys Ala Thr Pro
                           40
Ser Ser Leu Leu Cys Leu Ser Asp Lys Ser Ile Pro Ser Leu Ile Ser
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                                          60
Lys Gly Asp Ser *
65
           68
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<210> 1374 <211> 296 <212> PRT

<213> Homo sapiens

<400> 1374 Met Arg Ser Lys Ile Met Ile His Ile His Ile Phe Leu Leu Ala Ser 10 Phe Arg Phe Lys Glu His Val Gln Asn Asn Leu Pro Arg Asp Leu Leu 25 Thr Gly Glu Gln Phe Ile Gln Leu Arg Arg Glu Leu Ala Ser Val Asn 40 Gly His Ser Gly Asp Asp Gly Pro Pro Gly Asp Asp Leu Pro Ser Gly 55 Ile Glu Asp Ile Thr Asp Pro Ala Lys Leu Ile Thr Glu Ile Glu Asn 70 75 Met Arg His Arg Ile Ile Glu Ile His Gln Glu Met Phe Asn Tyr Asn 90 Glu His Glu Val Ser Lys Arg Trp Thr Phe Glu Glu Gly Ile Lys Arg 105 Pro Tyr Phe His Val Lys Pro Leu Glu Lys Ala Gln Leu Lys Asn Trp 120 Lys Glu Tyr Leu Glu Phe Glu Ile Glu Asn Gly Thr His Glu Arg Val 135 140 Val Val Leu Phe Glu Arg Cys Val Ile Ser Cys Ala Leu Tyr Glu Glu 150 155 Phe Trp Ile Lys Tyr Ala Lys Tyr Met Glu Asn His Ser Ile Glu Gly 165 170 . . 175 Val Arg His Val Phe Ser Arg Ala Cys Thr Ile His Leu Pro Lys Lys 180 185 Pro Met Val His Met Leu Trp Ala Ala Phe Glu Glu Gln Gln Gly Asn 200 Ile Asn Glu Ala Arg Asn Ile Leu Lys Thr Phe Glu Glu Cys Val Leu 215 220 Gly Leu Ala Met Val Arg Leu Arg Arg Val Ser Leu Glu Arg Arg His 225 230 235 Gly Asn Leu Glu Glu Ala Glu His Leu Leu Gln Asp Ala Ile Lys Asn 245 250 Ala Lys Ser Asn Asn Glu Ser Ser Phe Tyr Ala Val Lys Leu Ala Arg 265 His Leu Phe Lys Ile Gln Lys Asn Leu Pro Lys Ser Arg Lys Val Leu 280 Leu Glu Ala Ile Glu Arg Asp Lys 295 296

<210> 1375 <211> 75 <212> PRT <213> Homo sapiens

<400> 1375

Met Cys Leu Leu Lys Ala Ala Pro Phe Phe Phe Tyr Val Pro Gln 1 5 10 Val Gly Lys Gly Asn Pro Arg Pro Pro Arg Gly Cys Ser Ala Phe His 25 Pro Pro Thr His Leu Arg Pro Gly Ser Cys Ser Val Ala Gln Ala Gly 40 Val Gln Trp Arg Ser Leu Gly Ser Ile Ala Ala Ser Val Ser Trp Val 55 Gln Ala Ile Leu Leu Pro Gln Pro Leu Glu \* 70

<210> 1376 <211> 61 <212> PRT <213> Homo sapiens

<210> 1377 <211> 110 <212> PRT <213> Homo sapiens

105

Leu His Lys Asn Lys Gly Gly Thr Glu Ala Val Thr Val \*

<210> 1378 <211> 47 <212> PRT <213> Homo sapiens

<210> 1379 <211> 140 <212> PRT <213> Homo sapiens <400> 1379 Met Arg His Pro Ser Pro Trp Pro Phe Leu Phe Phe Cys Phe Val Pro 1 5 10 Ala Thr Leu Arg Ser Phe Pro Ser Gly Leu Val Trp Pro Gly Cys Trp 25 Trp Glu Pro Arg Ala Ser Pro Ser Ser Leu Ala Pro Gly Met Lys Ser 40 Gln Leu Trp Ala Ala Ala Trp Arg Pro Gly Thr Ser Leu Gln Gly Met 55 Ala Gly Ile Leu Arg Gln Ala Ala Glu Ala Gly Pro Ala Gly Val Ala 70 75 Leu Ile Leu Ile Lys Gly Thr Gly Asn Glu Glu Pro Leu Gly Pro Leu 85 90 Pro Ser Arg Cys Leu Cys Pro Pro Pro Glu Glu Pro Arg Phe His Trp 100 105 Ala Leu Gly Lys Glu Pro Thr Gly Pro Gly Arg Pro Gln Pro Val Gln 120 His His Ile Glu Gly Pro His Pro Val Gly Phe Gly 135 <210> 1380 <211> 50 <212> PRT <213> Homo sapiens <400> 1380 Met Gln Glu Pro Leu Thr Phe Leu Gln Leu Leu Arg Trp Gln Leu Phe 1 5 10 Pro Leu Pro Asp Ser Pro Thr Phe Ser Ala Phe Ile Leu Val Gly Leu 25 Cys Arg Met Leu Phe Ala Gly Arg Ile Ile Ser Gly Leu Thr Arg Val Ile \* 49 <210> 1381 <211> 78 <212> PRT <213> Homo sapiens <400> 1381 Met Leu Arg Leu Asp Ile Ile Asn Ser Leu Val Thr Thr Val Phe Met 1 5 10 Leu Ile Val Ser Val Leu Ala Leu Ile Pro Glu Thr Thr Thr Leu Thr

25

Val Gly Gly Gly Val Phe Ala Leu Val Thr Ala Val Cys Cys Leu Ala 35 40 45

Asp Gly Ala Leu Ile Tyr Arg Lys Leu Leu Phe Asn Pro Ser Gly Pro 50 55 60

Tyr Gln Lys Lys Pro Val His Glu Lys Lys Glu Val Leu \* 65 70 77

<210> 1382 <211> 57 <212> PRT

<213> Homo sapiens

<210> 1383 <211> 64 <212> PRT <213> Homo sapiens

Leu Pro Leu Lys Ser Glu Gln Ala Arg Pro Gly Gly Ser Arg Leu \* 50 55 60 63

<210> 1384 <211> 67 <212> PRT <213> Homo sapiens

50 55 60

Pro His \*
65 66

<210> 1385
<211> 50
<212> PRT
<213> Homo sapiens

<400> 1385

<210> 1386 <211> 123 <212> PRT <213> Homo sapiens

<400> 1386 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala 5 10 Tyr Ser Arg Gly Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val 20 25 Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu 40 45 Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn 50 55 Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu 70 75 Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro 85 90 Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val 105 Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe 120

<210> 1387 <211> 65 <212> PRT <213> Homo sapiens

<400> 1387
Met Pro Arg Leu Phe Ser Pro Leu Ile Leu Leu His Thr Leu Ser Leu
1 5 10 .15

Lys Ser His Glu Thr Phe Gln Trp Ser Gln Phe Leu Tyr Gln Asn Thr
20 25 30

Arg Asp Ala Cys Phe Thr Trp Thr Tyr Ile Phe Pro Arg Ile Thr Trp
35 40 45

Ile Asn Glu Trp Cys Cys Phe Pro Val Val Gly Glu Lys Leu Gly Thr
50 55 60 64

<210> 1388

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1388

<210> 1389

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1389

<210> 1390

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1390

Met Ala Ala Ser Pro Ala Arg Pro Ala Val Leu Ala Leu Thr Gly Leu 1 5 . 10 15
Ala Leu Leu Leu Leu Cys Trp Gly Pro Gly Gly Ile Ser Gly Asn

25 Lys Leu Lys Leu Met Leu Gln Lys Arg Glu Ala Pro Val Pro Thr Lys 40 Thr Lys Val Ala Val Asp Glu Asn Lys Ala Lys Glu Phe Leu Gly Ser 55 60 Leu Lys Arg Gln Lys Arg Gln Leu Trp Asp Arg Thr Arg Pro Glu Val 70 Gln Gln Trp Tyr Gln Gln Phe Leu Tyr Met Gly Phe Asp Glu Ala Lys 85 90 Phe Glu Asp Asp Ile Thr Tyr Trp Leu Asn Arg Asp Arg Asn Gly His 100 105 Glu Tyr Tyr Gly Asp Tyr Tyr Gln Arg His Tyr Asp Glu Asp Ser Ala 115 120 Ile Gly Pro Arg Ser Pro Tyr Gly Phe Arg His Gly Ala Ser Val Asn 135 Tyr Asp Asp Tyr \* 145 148

<210> 1391 <211> 125 <212> PRT <213> Homo sapiens

120

<210> 1392 <211> 56 <212> PRT <213> Homo sapiens

Ile Ile Leu Pro Leu His Pro \* <210> 1393 <211> 55 <212> PRT <213> Homo sapiens <400> 1393 Met Glu Ala Trp Lys Ala Leu Ile Gly Leu Phe Pro Leu Arg Ser Ser 10 Ala Ser Pro Phe Thr Tyr His Cys Trp Glu Pro Ala Gln Pro Ala His 20 25 Gln Glu Phe His Ser Thr Ile Ala Leu Arg Gly Arg Gly Gly Lys Pro 35 40 Gln Glu Glu Ser Ser Pro \* 50 <210> 1394 <211> 51 <212> PRT <213> Homo sapiens <400> 1394 Met Ser Leu Asn Pro Glu Phe Leu Trp Leu Lys Trp Phe Ser Leu Leu Leu Arg Gly Arg Arg Asn Ser Cys Leu Ile Ala Leu Lys Gly Tyr His 25 Ser Val Met Ile Phe His Leu Pro Leu Ile Pro Ser Ser Val Thr Ser Cys His \* 50 <210> 1395 <211> 105 <212> PRT <213> Homo sapiens <400> 1395 Met Pro Cys Phe Met Pro Asn Pro Gly Ala Val Leu Gly Leu Pro Pro 5 10 Trp Leu Leu Ser Thr Gln Arg Leu Thr His Thr Arg Ala Tyr Leu Asn 25 Trp Leu Ala Ser Asp Arg Trp Met Arg Arg His Trp Arg Thr Gly Glu

85 90 95
Phe Gly Leu Ser Leu Pro Ser Ile
100 105

<210> 1396 <211> 49 <212> PRT <213> Homo sapiens

<210> 1397 <211> 104 <212> PRT <213> Homo sapiens

<210> 1398 <211> 82 <212> PRT <213> Homo sapiens

Tyr Tyr Gly Thr Phe Pro Leu Gly Gly His His Ser Ala Glu Gly Thr 35 40 45

Ala Arg Gln Pro Leu Pro Ile Leu Pro Val Leu Ala Pro Ala Pro Ala 50 55 60

His Arg His Pro Ser Arg Ala Gly Glu Gln Glu Gly Asn Arg Ile Leu 65 70 75 80

Gln \* 81

<210> 1399 <211> 68 <212> PRT <213> Homo sapiens

<210> 1400 <211> 54 <212> PRT <213> Homo sapiens

<210> 1401 <211> 232 <212> PRT <213> Homo sapiens

20 25 Val Ile Arg Ala Leu Arg Leu Trp Arg Thr Ala Lys Leu Gln Val Thr 40 Leu Lys Lys Tyr Ser Val His Leu Glu Asp Met Ala Thr Asn Ser Arg 55 Ala Phe Thr Asn Leu Val Arg Lys Ala Leu Arg Leu Ile Gln Glu Thr 75 70 Glu Val Ile Ser Arg Gly Phe Thr Leu Leu Leu Asp Arg Val Ser Ala 90 Ala Cys Pro Phe Asn Lys Ala Gly Gln His Pro Ser Gln His Leu Ile 105 110 Gly Leu Arg Lys Ala Val Tyr Arg Thr Leu Arg Ala Ser Phe Gln Ala 115 120 125 Ala Arg Leu Ala Thr Leu Tyr Met Leu Lys Asn Tyr Pro Leu Asn Ser 135 140 Glu Ser Asp Asn Val Thr Asn Tyr Ile Cys Val Val Pro Phe Lys Glu 145 150 155 Leu Gly Leu Gly Leu Ser Glu Glu Gln Ile Ser Glu Glu Glu Ala His 165 170 175 Lys Leu Tyr Arg Trp Leu Gln Pro Ala Cys Ile Glu Gly Phe Val Pro 180 185 190 Thr Leu Gly Gly Thr Glu Phe Arg Val Leu Gln Thr Val Ser Pro Ile 195 200 205 Thr Phe Tyr Ser Gln Phe Thr Ser Trp Ala Leu Thr Tyr Ser Ser Thr 210 215 Ser Ala Ser Ser Tyr Leu Ile \* 230 231

<210> 1402 <211> 48 <212> PRT <213> Homo sapiens

<400> 1402

 Met Ala Pro Ala Arg Pro Trp Trp Leu Thr Pro Val Ile Pro Ala Leu

 1
 5
 10
 15

 Trp Glu Ala Glu Glu Asp Gly Ser Arg Gly Gln Glu Phe Lys Thr Ser
 20
 25
 30

 Leu Ala Ser Met Val Lys Pro Arg Leu Tyr Tyr Lys Tyr Lys Asn \*
 35
 45
 47

<210> 1403 <211> 53 <212> PRT <213> Homo sapiens

Tyr Cys Pro His \*
50 52

<210> 1404 <211> 90 <212> PRT <213> Homo sapiens

<210> 1405 <211> 477 <212> PRT <213> Homo sapiens

<400> 1405

Met Ala Gly Arg Gly Gly Ser Ala Leu Leu Ala Leu Cys Gly Ala Leu Ala Ala Cys Gly Trp Leu Leu Gly Ala Glu Ala Gln Glu Pro Gly Ala Pro Ala Ala Gly Met Arg Arg Arg Arg Leu Gln Gln Glu Asp Gly 40 Ile Ser Phe Glu Tyr His Arg Tyr Pro Glu Leu Arg Glu Ala Leu Val 55 60 Ser Val Trp Leu Gln Cys Thr Ala Ile Ser Arg Ile Tyr Thr Val Gly 70 75 Arg Ser Phe Glu Gly Arg Glu Leu Leu Val Ile Glu Leu Ser Asp Asn 90 Pro Gly Val His Glu Pro Gly Glu Pro Glu Phe Lys Tyr Ile Gly Asn 105 Met His Gly Asn Glu Ala Val Gly Arg Glu Leu Leu Ile Phe Leu Ala 120 125 Gln Tyr Leu Cys Asn Glu Tyr Gln Lys Gly Asn Glu Thr Ile Val Asn 135 140 Leu Ile His Ser Thr Arg Ile His Ile Met Pro Ser Leu Asn Pro Asp 150 155 Gly Phe Glu Lys Ala Ala Ser Gln Pro Gly Glu Leu Lys Asp Trp Phe 170 175 Val Gly Arg Ser Asn Ala Gln Gly Ile Asp Leu Asn Arg Asn Phe Pro 185 Asp Leu Asp Arg Ile Val Tyr Val Asn Glu Lys Glu Gly Gly Pro Asn

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200
Asn His Leu Leu Lys Asn Met Lys Lys Ile Val Asp Gln Asn Thr Lys
          215
                           220
Leu Ala Pro Glu Thr Lys Ala Val Ile His Trp Ile Met Asp Ile Pro
                     235
    230
Phe Val Leu Ser Ala Asn Leu His Gly Gly Asp Leu Val Ala Asn Tyr
            245
                           250
Pro Tyr Asp Glu Thr Arg Ser Gly Ser Ala His Glu Tyr Ser Ser Ser
                        265 270
Pro Asp Asp Ala Ile Phe Gln Ser Leu Ala Arg Ala Tyr Ser Ser Phe
 275 280
                                    285
Asn Pro Ala Met Ser Asp Pro Asn Arg Pro Pro Cys Arg Lys Asn Asp
                 295
                                 300
Asp Asp Ser Ser Phe Val Asp Gly Thr Thr Asn Gly Gly Ala Trp Tyr
305 310 315
Ser Val Pro Gly Gly Met Gln Asp Phe Asn Tyr Leu Ser Ser Asn Cys
                           330 335
Phe Glu Ile Thr Val Glu Leu Ser Cys Glu Lys Phe Pro Pro Glu Glu
                        345 350
Thr Leu Lys Thr Tyr Trp Glu Asp Asn Lys Asn Ser Leu Ile Ser Tyr
                     360
Leu Glu Gln Ile His Arg Gly Val Lys Gly Phe Val Arg Asp Leu Gln
                 375
                                 380
Gly Asn Pro Ile Ala Asn Ala Thr Ile Ser Val Glu Gly Ile Asp His
      390
                              395
Asp Val Thr Ser Ala Lys Asp Gly Asp Tyr Trp Arg Leu Leu Ile Pro
           405
                           410
Gly Asn Tyr Lys Leu Thr Ala Ser Ala Pro Gly Tyr Leu Ala Ile Thr
                        425
Lys Lys Val Ala Val Pro Tyr Ser Pro Ala Ala Gly Val Asp Phe Glu
     435 440 445
Leu Glu Ser Phe Ser Glu Arg Lys Glu Glu Glu Lys Glu Glu Leu Met
 450 455
                      460
Glu Trp Trp Lys Met Met Ser Glu Thr Leu Asn Phe *
       470
                      475 476
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<210> 1406 <211> 55 <212> PRT

<213> Homo sapiens

<210> 1407 <211> 66 <212> PRT

## <213> Homo sapiens

<210> 1408 <211> 58 <212> PRT

<213> Homo sapiens

<400> 1408

<210> 1409 <211> 72 <212> PRT

<213> Homo sapiens

<400> 1409

<210> 1410 <211> 53 <212> PRT <213> Homo sapiens

<400> 1411 Met Ala Ser Gln Ser Met Cys Phe Leu Trp Leu Ala Pro Val Thr Trp 5 10 Cys Val Met Phe Ser Ser Arg Thr Cys Tyr Ser Pro Cys Gly Asn Phe 20 25 Ser Thr Ala Pro Gly Arg Val Ile Phe His Ser Trp Asp Arg Ala Gln 40 Phe Val Tyr Ser Phe Leu Ser Arg Trp Arg Leu Gly Leu Phe Pro Pro 60 Leu Ala Ser Val Asn Gly Asp Ala Val Ile Met Gly Val Pro Val Phe 75 70 Val \* 81

<210> 1412 <211> 72 <212> PRT <213> Homo sapiens

<210> 1413 <211> 59 <212> PRT

## <213> Homo sapiens

<400> 1413

 Met
 Met
 Thr
 Ile
 Lys
 Glu
 Phe
 Thr
 Leu
 Leu
 Leu
 Val
 Ser
 Leu
 Gln
 Phe

 Ser
 Thr
 Phe
 Pro
 Ser
 Lys
 Lys
 Phe
 Leu
 Leu
 Glu
 Thr
 His
 Phe
 Leu
 Lys

 Asn
 Ser
 Glu
 Asn
 Trp
 Leu
 Gly
 Val
 Val
 Ala
 His
 Ala
 Cys
 Ser
 Leu
 Ser

 Thr
 Leu
 Gly
 Trp
 Pro
 Arg
 Arg
 Thr
 Ala
 \*

 50
 55
 58
 58

<210> 1414 <211> 78 <212> PRT <213> Homo sapiens

<400> 1414

<210> 1415
<211> 171
<212> PRT
<213> Homo sapiens

<400> 1415

Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser Ala Leu 10 1 5 Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln Gln Phe 25 Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val Lys Lys 40 Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu Leu Val 55 60 Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val Arg Asn 70 75 Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp Leu Tyr 85 Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val Leu Ile 105 Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala Leu Met . 120 Met Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly Leu Asn

<210> 1416 <211> 77 <212> PRT <213> Homo sapiens

<210> 1417 <211> 249 <212> PRT <213> Homo sapiens

70

<400> 1417 Met Glu Lys Ile Pro Glu Ile Gly Lys Phe Gly Glu Lys Ala Pro Pro Ala Pro Ser His Val Trp Arg Pro Ala Ala Leu Phe Leu Thr Leu Leu Cys Leu Leu Leu Ile Gly Leu Gly Val Leu Ala Ser Met Phe His 40 Val Thr Leu Lys Ile Glu Met Lys Lys Met Asn Lys Leu Gln Asn Ile 60 55 Ser Glu Glu Leu Gln Arg Asn Ile Ser Leu Gln Leu Met Ser Asn Met 70 75 Asn Ile Ser Asn Lys Ile Arg Asn Leu Ser Thr Thr Leu Gln Thr Ile Ala Thr Lys Leu Cys Arg Glu Leu Tyr Ser Lys Glu Gln Glu His Lys 100 105 Cys Lys Pro Cys Pro Arg Arg Trp Ile Trp His Lys Asp Ser Cys Tyr 120 125 Phe Leu Ser Asp Asp Val Gln Thr Trp Gln Glu Ser Lys Met Ala Cys 135 140 Ala Ala Gln Asn Ala Ser Leu Leu Lys Ile Asn Asn Lys Asn Ala Leu 150 155 Glu Phe Ile Lys Ser Gln Ser Arg Ser Tyr Asp Tyr Trp Leu Gly Leu 170 Ser Pro Glu Glu Asp Ser Thr Arg Gly Met Arg Val Asp Asn Ile Ile 185

<210> 1418 <211> 65 <212> PRT <213> Homo sapiens

<210> 1419 <211> 468 <212> PRT <213> Homo sapiens

<400> 1419 Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Val 5 10 Glu Gly Gln Lys Ser Asn Arg Lys Asp Tyr Ser Leu Thr Met Gln Ser 20 25 Ser Val Thr Val Gln Glu Gly Met Cys Val His Val Arg Cys Ser Phe 45 35 40 Ser Tyr Pro Val Asp Ser Gln Thr Asp Ser Asp Pro Val His Gly Tyr 55 60 Trp Phe Arg Ala Gly Asn Asp Ile Ser Trp Lys Ala Pro Val Ala Thr 70 Asn Asn Pro Ala Trp Ala Val Glu Glu Glu Thr Arg Asp Arg Phe His 85 90 Leu Leu Gly Asp Pro Gln Thr Lys Asn Cys Thr Leu Ser Ile Arg Asp 105 100 Ala Arg Met Ser Asp Ala Gly Arg Tyr Phe Phe Arg Met Glu Lys Gly 120 125 Asn Ile Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr 135 140 Ala Leu Thr His Arg Pro Asn Ile Leu Ile Pro Gly Thr Leu Glu Ser 150 155 Gly Cys Phe Gln Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln

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170
           . 165
Gly Thr Pro Pro Met Ile Ser Trp Met Gly Thr Ser Val Ser Pro Leu
          180
                 185
                                    190
His Pro Ser Thr Thr Arg Ser Ser Val Leu Thr Leu Ile Pro Gln Pro
                        200
Gln His His Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala
                    215
                                      220
Gly Val Thr Thr Asn Arg Thr Ile Gln Leu Asn Val Ser Tyr Pro Pro
     230
                                   235
Gln Asn Leu Thr Val Thr Val Phe Gln Gly Glu Gly Thr Ala Ser Thr
             245
                               250
Ala Leu Gly Asn Ser Ser Ser Leu Ser Val Leu Glu Gly Gln Ser Leu
          260 265
Arg Leu Val Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp
                       280
                                         285
Thr Trp Arg Ser Leu Thr Leu Tyr Pro Ser Gln Pro Ser Asn Pro Leu
                     295
                                       300
Val Leu Glu Leu Gln Val His Leu Gly Asp Glu Gly Glu Phe Thr Cys
                 310
Arg Ala Gln Asn Ser Leu Gly Ser Gln His Val Ser Leu Asn Leu Ser
              325
                               330
Leu Gln Gln Glu Tyr Thr Gly Lys Met Arg Pro Val Ser Gly Val Leu
                           345
Leu Gly Ala Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Ser
                        360
                                         365
Phe Cys Val Ile Phe Ile Val Val Arg Ser Cys Arg Lys Lys Ser Ala
                     375
                                      380
Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp Ala Asn Thr
                 390
                                   395
Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser Trp Ala Asp
             405
                               410
Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser Gly Glu Glu
                        425 430
        420
Arg Glu Ile Gln Tyr Ala Pro Leu Ser Phe His Lys Gly Glu Pro Gln
                       440
                                445
Asp Leu Ser Gly Gln Glu Ala Thr Asn Asn Glu Tyr Ser Glu Ile Lys
Ile Pro Lys *
465 467
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<210> 1420 <211> 150 <212> PRT <213> Homo sapiens

<400> 1420

<210> 1421 <211> 89 <212> PRT <213> Homo sapiens

<210> 1422 <211> 83 <212> PRT <213> Homo sapiens

 Along 1422

 Met Met Thr Trp Ala Ser Leu Ala Leu Gly Leu Thr Arg Ala Leu Gly 1

 Bly Met Gly Ser Phe Leu Leu Arg Ile Leu Gly Trp Ser Trp Ala Met 20

 Bly Ser Arg Ser Arg Ala Arg Trp Pro Arg Gly Arg Leu Gly Phe Thr 35

 Ser Met Leu Ser Cys Met Arg Gln Cys Ser Val Cys Arg Met Ile Met 50

 Ser Leu Val Glu Val Leu Val Ala Thr Ser Gln Val Val Lys Leu Trp 65

 Arg Arg \*

<210> 1423 <211> 54

<212> PRT <213> Homo sapiens

<400> 1423

<210> 1424 <211> 73 <212> PRT <213> Homo sapiens

<400> 1424

<210> 1425 <211> 245 <212> PRT <213> Homo sapiens

<400> 1425

Met Ala Cys Tyr Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu 10 1 5 Ile Ala Val Phe Asn Asn Thr Phe Phe Glu Val Lys Ser Ile Ser Asn 25 Gln Val Trp Lys Phe Gln Arg Tyr Gln Leu Ile Met Thr Phe His Glu 40 35 Arg Pro Val Leu Pro Pro Pro Leu Ile Ile Phe Ser His Met Thr Met 55 Ile Phe Gln His Leu Cys Cys Arg Trp Arg Lys His Glu Ser Asp Pro 70 75 80 Asp Glu Arg Asp Tyr Gly Leu Lys Leu Phe Ile Thr Asp Asp Glu Leu 85 Lys Lys Val His Asp Phe Glu Glu Gln Cys Ile Glu Glu Tyr Phe Arg 105 Glu Lys Asp Asp Arg Phe Asn Ser Ser Asn Asp Glu Arg Ile Arg Val 120

Thr Ser Glu Arg Val Glu Asn Met Ser Met Arg Leu Glu Glu Val Asn 135 140 Glu Arg Glu His Ser Met Lys Ala Ser Leu Gln Thr Val Asp Ile Arg 155 150 Leu Ala Gln Leu Glu Asp Leu Ile Gly Arg Met Ala Thr Ala Leu Glu 170 Arg Leu Thr Gly Leu Glu Arg Ala Glu Ser Asn Lys Ile Arg Ser Arg 1.85 Thr Ser Ser Asp Cys Thr Asp Ala Arg Leu His Trp Pro Val Arg Ala 200 Ala Leu Thr Ser Gln Glu Arg Glu His Leu Ser Ala Pro Lys Arg Gly 210 215 Leu Glu Pro Trp Gln Asn Ile Leu Phe Ile Gln Tyr Lys Pro Ala Ala 225 230 235 Ser Ser Ser Thr \* 244

<210> 1426

<211> 520

<212> PRT

<213> Homo sapiens

<221> misc\_feature

<222> (1) ... (520)

<223> Xaa = any amino acid or nothing

<400> 1426

Met Asp Ile Leu Leu Leu Leu Phe Phe Met Ile Ile Phe Ala Ile 5 10 Leu Gly Phe Tyr Leu Phe Ser Pro Asn Pro Ser Asp Pro Tyr Phe Ser 20 25 Thr Leu Glu Asn Ser Ile Val Ser Leu Phe Val Leu Leu Thr Thr Ala 40 Asn Phe Pro Asp Val Met Met Pro Ser Tyr Ser Arg Asn Pro Trp Ser 55 60 Cys Val Phe Phe Ile Val Tyr Leu Ser Ile Glu Leu Tyr Phe Ile Met 70 Asn Leu Leu Leu Ala Val Val Phe Asp Thr Phe Asn Asp Ile Glu Lys 85 90 Arg Lys Phe Lys Ser Leu Leu Leu His Lys Arg Thr Ala Ile Gln His 105 100 Ala Tyr Arg Leu Leu Ile Ser Gln Arg Arg Pro Ala Gly Ile Ser Tyr 120 125 Arg Gln Phe Glu Gly Leu Met Arg Phe Tyr Lys Pro Arg Met Ser Ala 135 140 Arg Glu Arg Tyr Leu Thr Phe Lys Ala Leu Asn Gln Asn Asn Thr Pro 150 155 Leu Leu Ser Leu Lys Asp Phe Tyr Asp Ile Tyr Glu Val Ala Ala Leu 165 170 Lys Trp Lys Ala Thr Lys Asn Arg Glu His Trp Val Asp Glu Leu Pro 185 Arg Thr Ala Leu Leu Ile Phe Lys Gly Ile Asn Ile Leu Val Lys Ala 200 205 Lys Ala Phe Gln Tyr Phe Met Tyr Leu Val Val Ala Val Asn Gly Val 215 Trp Ile Leu Val Glu Thr Phe Met Leu Lys Gly Gly Asn Phe Phe Ser

```
230
                                  235
Lys His Val Pro Trp Ser Tyr Leu Val Phe Leu Thr Ile Tyr Gly Val
                      250 255
              245
Glu Leu Phe Leu Lys Val Ala Gly Leu Gly Pro Val Glu Tyr Leu Ser
                            265
Ser Gly Trp Asn Leu Phe Asp Phe Ser Val Thr Val Phe Ala Phe Leu
              280
Gly Leu Leu Ala Leu Ala Leu Asn Met Glu Pro Phe Tyr Phe Ile Val
                    295
                                       300
Val Leu Arg Pro Leu Gln Leu Leu Arg Leu Phe Lys Leu Lys Glu Arg
                                   315
Tyr Arg Asn Val Leu Asp Thr Met Phe Glu Leu Leu Pro Arg Met Ala
                                330
Ser Leu Gly Leu Thr Leu Leu Ile Phe Tyr Tyr Ser Phe Ala Ile Val
          340
                            345
Gly Met Glu Phe Phe Cys Gly Ile Val Phe Pro Asn Cys Cys Asn Thr
                        360
                                         365
Ser Thr Val Ala Asp Ala Tyr Arg Trp Arg Asn His Thr Val Gly Asn
                    375
                                      380
Arg Thr Val Val Glu Glu Gly Tyr Tyr Tyr Leu Asn Asn Phe Asp Asn
                 390
                                   395
Ile Leu Asn Ser Phe Val Thr Leu Phe Glu Leu Thr Val Val Asn Asn
                               410
Trp Tyr Ile Ile Met Glu Gly Val Thr Ser Gln Thr Ser His Trp Ser
          420
                           425
Arg Leu Tyr Phe Met Thr Phe Tyr Ile Ala Thr Met Val Val Met Thr
           440
                                         445
Ile Ile Val Ala Phe Ile Leu Glu Ala Phe Val Phe Arg Met Asn Tyr
                    455
                                      460
Ser Arg Lys Asn Gln Asp Ser Glu Val Asp Gly Gly Ile Thr Leu Glu
                 470
                                   475
Lys Glu Ile Ser Lys Glu Glu Leu Val Ala Val Leu Glu Leu Tyr Arg
             485
                   490
Glu Ala Arg Xaa Ala Ser Ser Asp Val Thr Arg Leu Leu Glu Thr Leu
         500 505
Ser Gln Met Glu Arg Tyr Gln Gln
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<210> 1427 <211> 106 <212> PRT <213> Homo sapiens

<400> 1427

 Met
 Ser
 Pro
 Gln
 His
 Leu
 Leu
 Leu
 Thr
 Leu
 Pro
 Pro</th

Thr Thr His Arg Leu Pro Ser Cys Phe \* 100 105

<210> 1428 <211> 841 <212> PRT <213> Homo sapiens

<400> 1428 Met Ala Leu Ala Ser Ala Ala Pro Gly Ser Ile Phe Cys Lys Gln Leu 10 Leu Phe Ser Leu Leu Val Leu Thr Leu Leu Cys Asp Ala Cys Gln Lys 20 25 Val Tyr Leu Arg Val Pro Ser His Leu Gln Ala Glu Thr Leu Val Gly 40 Lys Val Asn Leu Glu Glu Cys Leu Lys Ser Ala Ser Leu Ile Arg Ser 55 Ser Asp Pro Ala Phe Arg Ile Leu Glu Asp Gly Ser Ile Tyr Thr Thr 70 His Asp Leu Ile Leu Ser Ser Glu Arg Lys Ser Phe Ser Ile Phe Leu 85 90 Ser Asp Gly Gln Arg Arg Glu Gln Glu Ile Lys Val Val Leu Ser 105 Ala Arg Glu Asn Lys Ser Pro Lys Lys Arg His Thr Lys Asp Thr Ala 120 125 Leu Lys Arg Ser Lys Arg Arg Trp Ala Pro Ile Pro Ala Ser Leu Met 135 140 Glu Asn Ser Leu Gly Pro Phe Pro Gln His Val Gln Gln Ile Gln Ser 150 155 Asp Ala Ala Gln Asn Tyr Thr Ile Phe Tyr Ser Ile Ser Gly Pro Gly 165 170 Val Asp Lys Glu Pro Phe Asn Leu Phe Tyr Ile Glu Lys Asp Thr Gly 185 Asp Ile Phe Cys Thr Arg Ser Ile Asp Arg Glu Lys Tyr Glu Gln Phe 200 Ala Leu Tyr Gly Tyr Ala Thr Thr Ala Asp Gly Tyr Ala Pro Glu Tyr 215 220 Pro Leu Pro Leu Ile Ile Lys Ile Glu Asp Asp Asn Asp Asn Ala Pro 225 230 235 Tyr Phe Glu His Arg Val Thr Ile Phe Thr Val Pro Glu Asn Cys Arg 250 245 Ser Gly Thr Ser Val Gly Lys Val Thr Ala Thr Asp Leu Asp Glu Pro 265 Asp Thr Leu His Thr Arg Leu Lys Tyr Lys Ile Leu Gln Gln Ile Pro 280 Asp His Pro Lys His Phe Ser Ile His Pro Asp Thr Gly Val Ile Thr 295 Thr Thr Thr Pro Phe Leu Asp Arg Glu Lys Cys Asp Thr Tyr Gln Leu 310 315 Ile Met Glu Val Arg Asp Met Gly Gly Gln Pro Phe Gly Leu Phe Asn 325 330 Thr Gly Thr Ile Thr Ile Ser Leu Glu Asp Glu Asn Asp Asn Pro Pro 345 Ser Phe Thr Glu Thr Ser Tyr Val Thr Glu Val Glu Glu Asn Arg Ile 360 Asp Val Glu Ile Leu Arg Met Lys Val Gln Asp Gln Asp Leu Pro Asn

. 375 380 Thr Pro His Ser Lys Ala Val Tyr Lys Ile Leu Gln Gly Asn Glu Asn 390 395 Gly Asn Phe Ile Ile Ser Thr Asp Pro Asn Thr Asn Glu Gly Val Leu 405 410 Cys Val Val Lys Pro Leu Asn Tyr Glu Val Asn Arg Gln Val Ile Leu 420 425 Gln Val Gly Val Ile Asn Glu Ala Gln Phe Ser Lys Ala Ala Ser Ser 440 Gln Thr Pro Thr Met Cys Thr Thr Thr Val Thr Val Lys Ile Ile Asp 455 460 Ser Asp Glu Gly Pro Glu Cys His Pro Pro Val Lys Val Ile Gln Ser 470 475 · Gln Asp Gly Phe Pro Ala Gly Gln Glu Leu Leu Gly Tyr Lys Ala Leu 485 490 Asp Pro Glu Ile Ser Ser Gly Glu Gly Leu Arg Tyr Gln Lys Leu Gly 500 505 Asp Glu Asp Asn Trp Phe Glu Ile Asn Gln His Thr Gly Asp Leu Arq 520 Thr Leu Lys Val Leu Asp Arg Glu Ser Lys Phe Val Lys Asn Asn Gln 535 Tyr Asn Ile Ser Val Val Ala Gly Asp Ala Val Gly Arg Ser Cys Thr 550 555 Gly Thr Leu Val Val His Leu Asp Asp Tyr Asn Asp His Ala Pro Gln 570 565 Ile Asp Lys Glu Val Thr Ile Cys Gln Asn Asn Glu Asp Phe Val Val 585 Leu Lys Pro Val Asp Pro Asp Gly Pro Glu Asn Gly Pro Pro Phe Gln 600 Phe Phe Leu Asp Asn Ser Ala Ser Lys Asn Trp Asn Ile Lys Lys 615 620 Asp Gly Lys Thr Ala Ile Leu Arg Gln Arg Gln Asn Leu Asp Tyr Asn 630 635 Tyr Tyr Ser Val Pro Ile Gln Ile Lys Asp Arg His Gly Leu Val Ala 645 650 Thr His Met Leu Thr Val Arg Val Cys Asp Cys Ser Thr Pro Ser Glu 665 Cys Thr Met Lys Asp Lys Ser Thr Arg Asp Val Arg Pro Asn Val Ile 675 680 Leu Gly Arg Trp Ala Ile Leu Ala Met Val Leu Gly Ser Val Leu Leu 695 700 Leu Cys Ile Leu Phe Thr Cys Phe Cys Val Thr Ala Lys Arg Thr Val 710 715 Lys Lys Cys Phe Pro Glu Asp Ile Ala Gln Gln Asn Leu Ile Val Ser 730 Asn Thr Glu Gly Pro Gly Glu Glu Val Thr Glu Ala Asn Ile Arg Leu 740 745 Pro Met Gln Thr Ser Asn Ile Cys Asp Thr Ser Met Ser Val Gly Thr 760 Val Gly Gly Gln Gly Ile Lys Thr Gln Gln Ser Phe Glu Met Val Lys **7**75 780 Gly Gly Tyr Thr Leu Asp Ser Asn Lys Gly Gly Gly His Gln Thr Leu 790 795 Glu Ser Val Lys Gly Val Gly Gln Gly Asp Thr Gly Arg Tyr Ala Tyr 810 Thr Asp Trp Gln Ser Phe Thr Gln Pro Arg Leu Gly Glu Glu Ser Ile Arg Gly His Thr Leu Ile Lys Asn \* 835

<210> 1429. <211> 262 <212> PRT <213> Homo sapiens

<400> 1429 Met Glu Leu Leu Gln Val Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys 10 Ser Ser Asn Ser Thr Gly Val Leu Glu Ala Ala Asn Asn Ser Leu Val 25 Val Thr Thr Lys Pro Ser Ile Thr Thr Pro Asn Thr Glu Ser Leu 40 Gln Lys Asn Val Val Thr Pro Thr Thr Gly Thr Thr Pro Lys Gly Thr 55 60 Ile Thr Asn Glu Leu Leu Lys Met Ser Leu Met Ser Thr Ala Thr Phe 70 75 Leu Thr Ser Lys Asp Glu Gly Leu Lys Ala Thr Thr Thr Asp Val Arg 85 90 Lys Asn Asp Ser Ile Ile Ser Asn Val Thr Val Thr Ser Val Thr Leu 100 105 Pro Asn Ala Val Ser Thr Leu Gln Ser Ser Lys Pro Lys Thr Glu Thr 120 125 Gln Ser Ser Ile Lys Thr Thr Glu Ile Pro Gly Ser Val Leu Gln Pro 135 140 Asp Ala Ser Pro Ser Lys Thr Gly Thr Leu Thr Ser Ile Pro Val Thr 145 150 155 Ile Pro Glu Asn Thr Ser Gln Ser Gln Val Ile Gly Thr Glu Gly Gly 165 170 175 Lys Asn Ala Ser Thr Ser Ala Thr Ser Arg Ser Tyr Ser Ser Ile Ile 185 Leu Pro Val Val Ile Ala Leu Ile Val Ile Thr Leu Ser Val Phe Val 195 200 205 Leu Val Gly Leu Tyr Arg Met Cys Trp Lys Ala Asp Pro Gly Thr Pro 210 . 215 220 Glu Asn Gly Asn Asp Gln Pro Gln Ser Asp Lys Glu Ser Val Lys Leu 230 235 Leu Thr Val Lys Thr Ile Ser His Glu Ser Gly Glu His Ser Ala Gln 250 Gly Lys Thr Lys Asn \* 260 261

<210> 1430 <211> 66 <212> PRT <213> Homo sapiens

35 40 45
Gln Asn Pro Asn Asn Val Leu Ile Phe Leu Gln Lys Trp Lys Asn Arg
50 55 60
Cys \*
65

<210> 1431 <211> 437 <212> PRT <213> Homo sapiens

<400> 1431 Met Leu Lys Val Ser Ala Val Leu Cys Val Cys Ala Ala Ala Trp Cys 10 Ser Gln Ser Leu Ala Ala Ala Ala Val Ala Ala Ala Gly Gly Arg 25 Ser Asp Gly Gly Asn Phe Leu Asp Asp Lys Gln Trp Leu Thr Thr Ile 40 Ser Gln Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys Phe Arg Asp Glu 55 60 Val Glu Asp Asp Tyr Phe Arg Thr Trp Ser Pro Gly Lys Pro Phe Asp 70 75 Gln Ala Leu Asp Pro Ala Lys Asp Pro Cys Leu Lys Met Lys Cys Ser Arg His Lys Val Cys Ile Ala Gln Asp Ser Gln Thr Ala Val Cys Ile 105 Ser His Arg Arg Leu Thr His Arg Met Lys Glu Ala Gly Val Asp His 120 125 Arg Gln Trp Arg Gly Pro Ile Leu Ser Thr Cys Lys Gln Cys Pro Val 135 140 Val Tyr Pro Ser Pro Val Cys Gly Ser Asp Gly His Thr Tyr Ser Phe 150 155 Gln Cys Lys Leu Glu Tyr Gln Ala Cys Val Leu Gly Lys Gln Ile Ser 170 Val Lys Cys Glu Gly His Cys Pro Cys Pro Ser Asp Lys Pro Thr Ser 185 190 Thr Ser Arg Asn Val Lys Arg Ala Cys Ser Asp Leu Glu Phe Arg Glu 200 Val Ala Asn Arg Leu Arg Asp Trp Phe Lys Ala Leu His Glu Ser Gly 220 215 Ser Gln Asn Lys Lys Thr Lys Thr Leu Leu Arg Pro Glu Arg Ser Arg 235 Phe Asp Thr Ser Ile Leu Pro Ile Cys Lys Asp Ser Leu Gly Trp Met 250 Phe Asn Arg Leu Asp Thr Asn Tyr Asp Leu Leu Asp Gln Ser Glu 260 265 Leu Arg Ser Ile Tyr Leu Asp Lys Asn Glu Gln Cys Thr Lys Ala Phe 280 Phe Asn Ser Cys Asp Thr Tyr Lys Asp Ser Leu Ile Ser Asn Asn Glu 295 300 Trp Cys Tyr Cys Phe Gln Arg Gln Gln Asp Pro Pro Cys Gln Thr Glu 310 315 Leu Ser Asn Ile Gln Lys Arg Gln Gly Val Lys Lys Leu Leu Gly Gln 325 330 Tyr Ile Pro Leu Cys Asp Glu Asp Gly Tyr Tyr Lys Pro Thr Gln Cys 345

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His Gly Ser Val Gly Gln Cys Trp Cys Val Asp Arg Tyr Gly Asn Glu
             360
                                  365
Val Met Gly Ser Arg Ile Asn Gly Val Ala Asp Cys Ala Ile Asp Phe
                      375
                                         380
Glu Ile Ser Gly Asp Phe Ala Ser Gly Asp Phe His Glu Trp Thr Asp
                  390
                                     395
Asp Glu Asp Asp Glu Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu
Asp Asp Asp Glu Asp Glu Gly Asp Asp Asp Asp Gly Gly Asp Asp His
           420
                            425
                                                430
Asp Val Tyr Ile *
       435 436
    <210> 1432
    <211> 53
    <212> PRT
    <213> Homo sapiens
    <400> 1432
Met Ser Tyr Val Glu Ile Leu Ile Pro Val Leu Leu Cys Leu His Ala
                                 10
Phe Phe Pro Ser Ser Arg Arg His Val Ala Trp Phe Leu Ile Phe Ile
                       25
Cys Lys Phe Phe Lys Phe Cys Leu Ile Leu Lys Phe Ile Ile Leu Ile
    35
Leu Asn Tyr Leu *
   50 52
    <210> 1433
    <211> 76
    <212> PRT
    <213> Homo sapiens
    <400> 1433
Met Glu Leu Lys Gly Phe Trp Leu Cys Leu Phe Leu Arg Phe Val Lys
                                 10
Trp Phe Val Asn Lys Gly Met Ile Leu Cys Thr Leu Phe Tyr Asn Leu
                             25
Ile Tyr Ser Leu Tyr Asn Met Cys Trp Thr Val Leu Trp Ile Arg Lys
Tyr Gln Thr Leu Leu Lys Glu Ser Phe Phe Ser Leu Asn Thr Phe Leu
           55
Phe Lys Asp Lys Ala Ser Thr Ser Ile Pro Leu *
                   70
    <210> 1434
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<211> 169 <212> PRT <213> Homo sapiens

<400> 1434 Met Glu Ser Trp Trp Gly Leu Pro Cys Leu Ala Phe Leu Cys Phe Leu Met His Ala Arg Gly Gln Arg Asp Phe Asp Leu Ala Asp Ala Leu Asp 25 Asp Pro Glu Pro Thr Lys Lys Pro Asn Ser Asp Ile Tyr Pro Lys Pro 40 Lys Pro Pro Tyr Tyr Pro Gln Pro Glu Asn Pro Asp Ser Gly Gly Asn 50 55 60 Ile Tyr Pro Arg Pro Lys Pro Arg Pro Gln Pro Gln Pro Gly Asn Ser 70 Gly Asn Ser Gly Gly Ser Tyr Phe Asn Asp Val Asp Arg Asp Asp Gly 85 90 Arg Tyr Pro Pro Arg Pro Arg Pro Pro Pro Ala Gly Gly Gly 100 105 110 Gly Gly Tyr Ser Ser Tyr Gly Asn Ser Asp Asn Thr His Gly Gly Asp 125 115 120 His His Ser Thr Tyr Gly Asn Pro Glu Gly Asn Met Val Ala Lys Ile 130 135 140 Val Ser Pro Ile Val Ser Val Val Val Thr Leu Leu Gly Ala Ala 145 150 Ala Gln Leu Phe Gln Thr Lys Gln \* 165 168

<210> 1435 <211> 162 <212> PRT <213> Homo sapiens

<400> 1435 Met Arg Phe Val Thr Leu Ser Ser Ala Cys Leu Cys Pro Cys Pro Leu 10 Gly Pro Cys Trp Thr Arg His Pro Ser Tyr Gly Asn Leu His Glu Ala 25 Ser Thr Ser Leu Pro Pro Arg His Trp Thr Gly Ala Arg Lys Trp Asn 35 40 Glu Ser Ser His Cys Leu Lys Ser Trp Arg Pro Ser Ser Ala Ser Gly 50 55 60 Ser Pro Glu Asn Leu Gly Ser Asp Arg Arg Thr Glu Thr Glu Gly Arg 70 75 Glu Arg Asp Cys Asp Arg Glu Ala Glu Glu Gly Asp Arg Val Arg Glu Glu Gln Asn Ser Leu Gln Trp Glu Gln Arg Gln Lys Cys Gly Gly Pro Thr Gly Arg Gly Gly Arg Glu Gly Glu Gly Arg Arg Glu Gly Gln Leu 115 120 Pro Val Gln Val Ala Val Arg Ala Leu Gly Leu Gly Arg Gly Thr Leu 135 140 Leu Leu Leu Ala Ser His Thr Gly Ser Ile Arg Gly Pro Arg Glu Gln Val Ser 162

<210> 1436

<211> 77 <212> PRT <213> Homo sapiens

<210> 1437 <211> 85 <212> PRT

<213> Homo sapiens

<210> 1438 <211> 76 <212> PRT <213> Homo sapiens